

```

1 TCCAGTTTAA GTGTTGGGAT TCCAAAGGAA ACACACAAAC CTCACGAAAG
51 SAAGGAACCA AGCAAGCAAG SAAGGAACGT CAGGAGGAAA AGAACAGGCA
101 SAACAGGCAAG AAGCAATAAAG GGAAGAGGAG GGAACACCCA AATCTATGAT
151 TGGAGCTTGG CTTCTTTTTC GCTAATGCAA AAAGGAATAT GCAGTACATT
201 TTGGGCTTCT TCTGCAAGCG TTTCCTAGGC GCGGTAGIAG GTCCCAATTT
251 CTTCAACAAT ATCCAGATCG GGGGATTATT TCCAAAGCAG CACTACAGG
301 AACATGTCG TTTAGATT TTCTGTCG AATTCAGAG GCTCCGGAAG
351 CTGCTTCTCG ASATTGATAT TGTGAACATC AGCGATAGCT TTGAGATGAC
401 CTATAGATTC TGTTCCAGT TCTCCAAAGG ACTCTATGCG ATCTTTGGGT
451 TTATGAAAG TAAAGCTGTG AACATGCTGA CTTCTTTTGG TGGGGGCTGC
501 CATCTCTGCT TCATTACGCG GAGCTTTTCT GTTGATATAT CCAATCAGTT
551 TCTCTTCTAG CTGCGGCTCG AATTCAGGGA TCGGCTATC AGTATCATGG
601 ACCATTACAA GTGGCAGAAA TTTGTCATCA TTTATGATGC CGACCGGGGC
651 TCTATCTCTG TGCAAGAAAGT CCTGGAAGCA GCTGTCAGAG AGAAGTGGCA
701 GGTGACAGCA GTCAATATTT TGAACACAC AGAGGAGGGA TACGGGATGC
751 CTTCTCAAGA CTGGGAGAGG AAAAAAGAGG GCGTGTGGT GGTGACGCT
801 GAATCAAGAC GCTCAATGC TATCTTGGGC CAGATATATA AGCTAGAGAA
851 GAATGTCATC GGTACCACT ACATTCTTGC AAATCTGGGC TCTATGACA
901 TCGAATTAAG CAATTCAGG GAGAGTGGCG CCAATCTGA AGGTTTCCAG
951 CTGGTGAAT ACACAGACAT TATTCGGCT AAGATCATGC AGCAGTGGAA
1001 GAATAGTCTAT GCTGGAGAGC ACACAGGCT GGAATGGAAG AGACCCAGT
1051 ATAGCTCTCT GCTCAAGTAC GATGGGCTGA AGGTGATGCG TGAGGCTTTC
1101 CAGAGCTTCT GGAAGCAGAG AATTGATATA TCTGCGCGG GGAATGCTGG
1151 GATTTCTCTG GCTAAACAG CTCTTCTCTG GGGCAAGGG ATGACATAC
1201 AGAGAGCTCT GAGCAGGCTG CGATTGGAAG GTTTAAGAGG AAAGCTGGAG
1251 TTAAATGAGA AAGGAGGCGG GACCAATAC ACCTCTAGG TGATTGAAAT
1301 GAAGAGGAG GCTATCCGAA AGATTGCTTA CTGGAATGAA GATGATAAGT
1351 TCTCTCTCTG AGTCAAGAT GCGCAAGCTG GCGGGGATAA TTCAAGTCTT
1401 CAGAAAGAGA CATACATCGT CACAACAATC CTAGAAGATC CTTATGCTAT
1451 GCTCAAGAG AAGGCAATC AGTTTGAGGG CAATGACCT TACGAGGCTT
1501 ACTGCTGAGA GCTGGGCGCA GAGATTGCGA AGGACSTGGT CTACTCTAC
1551 GCTCTGAGA TTCTCAGTGA TGGAAAATAC GGAAGCGAG ACCCTGACAC
1601 GAAGGCTTGG AATGGCATGG TGGGAGAGCT GGTCTATGGA GTAAGTTCAC
1651 GCGAGGCTGT GAAATTAGAG GCGGAGGCA GAGGCTTGA CAGGAAATCA
1701 TTGCTGCTGT GGTGGGCTCT GCTCAAGAT GTCTATGAAA CCGTGTAAAT
1751 GAGCTGCTGT GCTGCTGAAC AGATGAGTCA TCCAAATCG AATTTCCTCA
1801 GAAGCTCTTT GTTCAGGTTA CTGGTCTAG GTCCTTCAAT CCGACTCAGA
1851 GTCTGCTGAG GTGAGTTGAT TGTCTGCA CACAGGTGAG AGCATAGCTC
1901 CAAGATCAAT TTTCTGAGG CAGACTGCTG AGTGTCTAT ACAAGTCAAC
1951 TTCTGCTCT CTGAGTATCA GTTCTCTCTG TGATATTAAG TGCATCTCA
2001 GCAAACTAA CTTCTAGTCT ACTTGGCTCT CTAGTTCTAT GCGCTCTCAT
2051 GAATTTGCA ATTCAGTCAA ATGCGCTTCA ATTACTCTCT TCCCTAGAGT
2101 GCTGCTCTCT ACTCTCAGC CTTAAGATAC TACTCTCTCA AAACCTATAT
2151 CAATAATAC TTTTTCAGG GTGTGTTTCT TTCTTCTCTG TCATAAGAGG
2201 TATGAATGTG CTTTCTAAT GTTCTGCTCT TCCCTATAG AATTCTAGTG
2251 CTGCTTTTTT TTAATGCTTT ACCCTGCTCT ATATAAGGT TACCTGTGTA
2301 ACAGGGGTAG GACTATTCTA TCTTTATAGT GCTCAGGACA CTTGAAATAA
2351 CTGATGCAAC AATTGCTATA AAATCTTCAA TAAATTACAG CAGTTTGGAA
2401 AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAA

```

(SEQ ID NO: 1)

FEATURES:

5'UTR: 1 - 188
 Start Codon: 189
 Stop Codon: 1746
 3'UTR: 1749

HOMOLOGOUS PROTEINS:

Top BLAST Hits:

Sequences producing significant alignments:

	Score (bits)	E Value
CRA 18000004891320 /altid=gi 106114 /def=pir A41273 glutamate ...	998	0.0
CRA 18000004924128 /altid=gi 183281 /def=gb AAA58613.1 (M64752...	998	0.0
CRA 18000004904030 /altid=gi 478699 /def=pir S25852 glutamate ...	996	0.0
CRA 18000004891322 /altid=gi 4504113 /def=ref NP_000818.1 glut...	996	0.0
CRA 18000004904031 /altid=gi 481504 /def=pir S38723 glutamate ...	990	0.0
CRA 18000004938820 /altid=gi 6680087 /def=ref NP_032191.1 glut...	984	0.0
CRA 18000004976647 /altid=gi 227246 /def=prf 1617121A Glu rece...	984	0.0
CRA 18000005142807 /altid=gi 3402257 /def=emb CAA35050.1 (X171...	982	0.0
CRA 18000004967543 /altid=gi 279674 /def=pir ACPTK1 glutamate ...	979	0.0
CRA 18000004936319 /altid=gi 202868 /def=gb AAA61479.1 (M38060...	979	0.0

EST:

Sequences producing significant alignments:

	Score (bits)	E Value
gi 12445102 /dataset=dbest /taxon=96...	1923	0.0
gi 8061803 /dataset=dbest /taxon=960...	590	0.0
gi 12066444 /dataset=dbest /taxon=96...	373	e-100

EXPRESSION INFORMATION FOR MODULATORY USE:

gi|12445102 placenta
gi|8061803 /nervous
gi|12066444 brain

Tissue Expression:
hippocampus

1 MCHFAFFET GELGAVVGSN FPNNIQIGSL FPNQQSQEHA AFRFALSQLT
 51 EIPKLLPQID IVNIDDFEM TYRFSQFSK GYVAIPGEYE PRTVNMLTSE
 101 CGALHVCFIT FSEFVDSNQ FVLQLRPELQ DALISIIDHY EWQKFVYIYD
 151 ADFILSVLQK VLEIAAEKNM QVTAVNLTIT TEEGYRMLFQ DLEKKKERLV
 201 VVICESERIN AILQJIKLE KNGIGYHYIL ANLGFMIDL NKFESGANV
 251 TGFQLVNYTD TIFAKINQW ENSEARDHTR VDWKRPKYTS ALTYDGVKVM
 301 AEAQSLPRK FIDIAFFGHA GDELAFAPV WGQGIDIQRA LQQVRFEGLT
 351 SNVQENEFSE FTHGTHVIE MKKSGIRKIG YWNEDDKFVP AATDAQAGGD
 401 NSSTQNRTII TTHLAEPPV MLKKNANQFE GNDRYEGYCV ELAAEIAKHV
 451 DNYRLEIYA LGHTGARDFD TRAWNGMVSE LVIQVSSLQG GKLEGGGRSF
 501 DRYSEGGWVA LPTLVYETL
 (SEQ ID NO: 2)

FEATURES:

Functional domains and key regions:

[1] PF000001 PS00001 ASN_GLYCOSYLATION
 N-glycosylation site

Number of matches: 6

1 42-46 NISI
 2 249-252 DVTH
 3 25-26 NIT
 4 363-364 NITL
 5 401-404 NSSV
 6 406-409 NRTV

[2] PF000005 PS00005 PKC_PHOSPHO_SITE
 Protein kinase C phosphorylation site

Number of matches: 5

1 71-73 TYF
 2 206-208 SEF
 3 306-308 YLF
 4 315-317 SEF
 5 453-455 SYF

[3] PF000006 PS00006 CK2_PHOSPHO_SITE
 Casein kinase II phosphorylation site

Number of matches: 6

1 131-132 SIID
 2 181-182 TAAG
 3 179-182 TITE
 4 150-153 TIEE
 5 279-282 TEVE
 6 413-416 TIEE

[4] PF000008 PS00008 MYEISTYL
 N-myristoylation site

Number of matches: 7

1 14-19 SAVVGA
 2 21-24 GLEPNQ
 3 247-250 GANVTG
 4 448-451 GTHNV
 5 353-356 GGNHSS
 6 445-448 GIGSEF
 7 506-511 GHWVAL

[5] PF000009 PS00009 AMIDATION
 Amidation site

358-361 EGFE

Membrane spanning structure and domains:

Helix	Begin	End	Score	Certainty
1	1	2	1.803	Certain
2	55	111	1.636	Certain

BLAST Alignment to Top Hit:

```
>EPA18000004891320 /altid=gil106114 /def=pir||A41273 glutamate
receptor precursor - human (fragment) /org=human
/taxon=9606 /data-bt=nraa /length=896
Length = 896
```

```
Score = 998 bits (553), Expect = 0.0
Identities = 484/484 (100%), Positives = 484/484 (100%)
Frame = +3
```

```
Query: 189 MQHIFAFFCTSELGAVVQANFNNIIGGLFNNQSQEHAAPFALSQLEPPKLLPQID 368
MQHIFAFFCTSELGAVVQANFNNIIGGLFNNQSQEHAAPFALSQLEPPKLLPQID
Sbjct: 1 MQHIFAFFCTSELGAVVQANFNNIIGGLFNNQSQEHAAPFALSQLEPPKLLPQID 60

Query: 369 IVNISDSFEMTYFFCSQFSKGVYAIFGFYERFTVNNLTSEFGALHVCFITPSFPVDTSNQ 548
IVNISDSFEMTYFFCSQFSKGVYAIFGFYERFTVNNLTSEFGALHVCFITPSFPVDTSNQ
Sbjct: 61 IVNISDSFEMTYFFCSQFSKGVYAIFGFYERFTVNNLTSEFGALHVCFITPSFPVDTSNQ 120

Query: 549 FVLQLRPELQDALISIIHYYWQFVYIYDALFSLSVLQFVLDTAAEFNWQVTAVNILIT 728
FVLQLRPELQDALISIIHYYWQFVYIYDALFSLSVLQFVLDTAAEFNWQVTAVNILIT
Sbjct: 121 FVLQLRPELQDALISIIHYYWQFVYIYDALFSLSVLQFVLDTAAEFNWQVTAVNILIT 180

Query: 729 TEEGYRMIFQDLEFFKFLVVDCESEFLNAILGQIIFLEFNGIGYHYILANLGFMEICL 908
TEEGYRMIFQDLEFFKFLVVDCESEFLNAILGQIIFLEFNGIGYHYILANLGFMEICL
Sbjct: 131 TEEGYRMIFQDLEFFKFLVVDCESEFLNAILGQIIFLEFNGIGYHYILANLGFMEICL 240

Query: 909 HFFFGSAGNVTFGLVNTTDTIPAKIMQWQNSDAFDHTFVDWFFPKYTSALTYDGVFVM 1088
HFFFGSAGNVTFGLVNTTDTIPAKIMQWQNSDAFDHTFVDWFFPKYTSALTYDGVFVM
Sbjct: 241 HFFFGSAGNVTFGLVNTTDTIPAKIMQWQNSDAFDHTFVDWFFPKYTSALTYDGVFVM 300

Query: 1089 AEAFQSLFQFQIDISRFENAGDCLANEAVPWQSGIDIQFALQQVFEGLTGNVQFNEFGF 1268
AEAFQSLFQFQIDISRFENAGDCLANEAVPWQSGIDIQFALQQVFEGLTGNVQFNEFGF
Sbjct: 361 AEAFQSLFQFQIDISRFENAGDCLANEAVPWQSGIDIQFALQQVFEGLTGNVQFNEFGF 360

Query: 1269 EPNYTLHVIEHFHDSIFPIGYWNEEDFFVFAATDAAGGDNSSVQNFYIVTTILEPPYV 1448
EPNYTLHVIEHFHDSIFPIGYWNEEDFFVFAATDAAGGDNSSVQNFYIVTTILEPPYV
Sbjct: 361 EPNYTLHVIEHFHDSIFPIGYWNEEDFFVFAATDAAGGDNSSVQNFYIVTTILEPPYV 420

Query: 1449 MLFKNANLFEHDFEYCYVELAAEIAFHVGYSYLEIVSDGKYGAFDPDTKAWNEMVSE 1628
MLFKNANLFEHDFEYCYVELAAEIAFHVGYSYLEIVSDGKYGAFDPDTKAWNEMVSE
Sbjct: 421 MLFKNANLFEHDFEYCYVELAAEIAFHVGYSYLEIVSDGKYGAFDPDTKAWNEMVSE 480

Query: 1629 LVYS 1-40
LVYS
Sbjct: 481 LVYS 484 (SEQ ID NO : 4)
```

Hammer search results (Pfam):

Scores for sequence family classification (score includes all domains):

Model	Description	Score	E-value	N
CE00269	CE00269 kainate_receptor	646.8	1.1e-190	1
PF01094	Receptor family ligand binding region	101.4	1.4e-27	1
CE00294	CE00294 glutamate_receptor_6	47.5	5.9e-14	1

Parsed for domains:

Model	Domain	seq-f	seq-t	hmm-f	hmm-t	score	E-value
PF01094	1 1	55	393 ..	55	464 ..	101.4	1.4e-27
CE00294	1 1	347	474 ..	376	507 ..	47.5	5.9e-14
CE00269	1/1	21	484 ..	42	544 ..	646.8	1.1e-190

1 TTCAAAATAG TAA ATACAA AACTTAAAA TGAGAAATT AAAAGATCGA
51 ATCAATAAAT CAGAAATCTT TAATTTTTC AGAGACCTTA GAATGATCT
101 TTCTTATTT TGCTTCTTA TTTTCTAT CTGATCTTA TTCTTCTTT
151 AGAATCTCTT TAATCTCTT TTTCTCTT TATAGCTTAA GAGTTAAAG
201 CTGATCTTT ATCTCTCTT TCTTCTCTT TAAATCTTA ATCTCTTT A
251 TTATCTCTTA AAAATCTCTT TCTCTCTT TAAATCTTA ATCTCTTT A
301 TAAATCTCTT ATCTCTCTT CTATCTCTT ATTCTCTTA TAAATCTCTT
351 AGGCTCTCTT CTATCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
401 ATCTCTTT AAAATCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
451 ATCTCTCTT AAAATCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
501 TCTCTCTTA TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
551 CACTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
601 TCTCTCTTA TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
651 ATTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
701 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
751 GCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
801 GCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
851 GCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
901 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
951 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1001 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1051 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1101 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1151 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1201 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1251 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1301 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1351 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1401 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1451 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1501 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1551 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1601 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1651 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1701 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1751 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1801 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1851 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1901 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
1951 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2001 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2051 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2101 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2151 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2201 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2251 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2301 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2351 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2401 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2451 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2501 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2551 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2601 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2651 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2701 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2751 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2801 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2851 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2901 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
2951 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
3001 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
3051 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
3101 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
3151 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
3201 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
3251 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
3301 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
3351 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
3401 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
3451 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT
3501 TCTCTCTT TCTCTCTT TCTCTCTT ATTCTCTTA TAAATCTCTT

FIGURE 3, page 1 of 122

3551 AATGCGCATG GASTAATTG DTTTGTTCCT TGACAGCTGT TAAGCTACAT
3601 CCTGAAATGT GTACATATCT GTGTGTAGT GCCTACACAG CAAAACCTC
3651 TGCTTTAGG GAGAGACCT CCGTGTAGT CCAGAGGATA GGTGTACTT
3701 CTTAAAGATC CCAATTTTTC TCTTTATT : ATTGACAGG AGAGAGAGG
3751 GGAAGGAGAA GTTTTGGG TGTGTGATG TGGGAGGAG GGTAGATG
3801 AATATCAAGA ATTTTCTTG TTATATGPGG CATATATTAG ATTTGTCTT
3851 CATGTGAAA TCACTTATC TTATATGPGG CATATATTAG ATTTGTCTT
3901 ATATATATC TATCTTTGT GGTGTGAGG TGTTTTCTA GTATATTCT
3951 GTATATAGTA AATGATATAA ATGATGAGG ATGTTTGTG TATGTGTAT
4001 GTTTTGTGAT GTATTTTGT ATATTTTAA AATTTATTG AGCTTAAAT
4051 TGSTGTGTA AGTATAGAG CCAITGATG TGTTTTAAA AAAAAAAG
4101 ATTGAAGCAT TAAATTTAG AAAAAAATG TGAAAAAT : ACTGACATTA
4151 GGTATATCT GATTTTATT GTGTGATCT TAACAAAAAG CTGTAATG
4201 ATTTATTTGT TTTAAAAAG AGAGATCTA TCTACAGAA GTTAGAAGTG
4251 CATATTTT GATTTGTGAT TACTGTAGA TTTGAGATAA AGTTTATAT
4301 AAACATCAT ATAGTTTGT CTCTAGAAAT GGCTGATTT AATTCAGAA
4351 AATGTAATTG ATTTATATCT TGACAGTAAA TACAAAGCTA AGGATGAGG
4401 TCTTTTCTT CAGAGAGAG ATGATCTAG GCACCTTAT TATCTTTT
4451 ACTAGAGATG AATGTTTGT TCTTTTGTG ATGCTAAGA TCTGATCT
4501 TTGAAGCACA AGATTTGAG ATGCAAAAG ACAATGTA TCTTTTCT
4551 AACAAGTCT TCTAGATTA CTGAGATCAT GTGTGTGAA AGATTAAGTA
4601 AAACATTTT TGAAGAAAA CAGAGTTT TACAGAAAA GAATAATAA
4651 CTTTACGGGG ATAGAGATG TTAATTTGCA TGAAGTTT GATAGAGAA
4701 AGATTAAGAA CTCTTCTG AAGAGTTAT AGTATGAG AGCTTACAG
4751 GTCTTACAG CTATATTTA ATCACTTCT AGTATGAT ACTATCTAT
4801 TCTGTAAGG CTCTTCTG AGAGATGAG CTGATGTAAG AAAAATTGA
4851 CATGATGAG GGTGAGGGG GCTTATGCT ATTTTATAT AAGAGATAG
4901 CAGCTTCTG GTCTTTTGA CAGAGAGAA AGAGAGAAA TGTGCAAGT
4951 TCTCTTTT CTCTGATTT AGTGTGTTG AGGATTAAG AATCAATCT
5001 TGAAGCAAG TAATAGATAT TAGAGGCTA TGTACAAAA AGCTGATCT
5051 TTAGGAGTTT AAGTTTCTG GTCTGATTA GCTTATTTA ACTTTCTAT
5101 CTACCATTA AGGCTAAGG TATGATTTT GGCTGAGGA GAGAGAAAG
5151 ACTCATTTG AGTATCTCT GAGGAGCTA AACCTGCTC TAGCTATAT
5201 AGCATTTCT ATTTTCTTT CTGATAGGG GATTTATTC AAGAGAGAG
5251 TGCAGAGAG ATGCTGTTT TATATTTGT TTCTGCAAG TCAAGAGAG
5301 CCGAGAGCT CTCTGAGG ATGATATCT GAGATCAGG GATAGCTTG
5351 AGATGAGCTA TAGATTAAG TAATTTCTC TATTCTGAG ATTTCTTTT
5401 GGTATAGAG AATGAGAGG GGTCTGCTG GTAGCTGCT GTCTGCAAA
5451 AATGATTTA GTCTGATTC GTTTTGTAA GAGAGAGCT TGAAGAGAA
5501 ATTTTCTAG GATTTGAT GATTTGATG GTTTGATTT TAGCTTTT
5551 AATCTTCTA GTATTTAT TGTCTTTTA CTGATCTTA ACTTTATCT
5601 CAGATCTAG GGTCTTCTG TGAATGCTA CTCTCTAGG TGTATAGCT
5651 TTTCTGCTA AGCTGAGAG GTTTTACATA TAGGATCTT CTGAGAGCT
5701 TAGAATTAG GGTCTTCTG TTGTGAAAT GTGCTTTAA GTCTTTAGG
5751 CATTTCTAT CTATATTTA AATGAGAGG ATCTGCTCT ATAGAGATA
5801 ATAGCTGAG AGTTTATTA ATCTGCTCT TCAATTTCT AAGTATTA
5851 TAATTAAGG TGTCTTCTG GGTATTTTA AAAATAGCT CAGAGAAAT
5901 GTTGTTTAG GATAGTTTG TAGGATGCT ATTTGAGCT AAGAGAGAG
5951 AAGGTGCT CAGAGAGAG GATAGATAA ATCTCTGAG TGTGATTTA
6001 ATGATTTGA AATTTGCT AACAAGAG ATTTGAGCT TGTGCTGAA
6051 CTAGAGAT AAGAGAGCT TGTGCTGAG TGTGCTGAG TGTGCTGAG
6101 ATGAGAGCT AAAAAATTA CAGAGAGAT ATTTTCTCT CAGAGATTA
6151 GTTCAAGTAA AATTTTATG CAGAGAGAG TGAAGCTAA TCAAGAGAG
6201 AATTTGAGG CCAAGCTG ATTTGATTT CAGATAGCT TGTGCTGAG
6251 ATATTTAT TGTGCTGAG TGTGCTGAG TGTGCTGAG AATGATTA
6301 CAGATCTCT TTTTCTTT TGTGCTGAG CAGATCTG GATTTTAT
6351 ATTTAATAG GTATTTT TAAATTTTA AATGAGAGT CAGATTTT
6401 TATATTTAA AGATTTCT : TAAATTAAT TGTGCTGAG TGTGCTGAG
6451 TATATTTAA GTATTTCT AATTTTCT AATTTTCT AATTTTCT
6501 ATGATTAATA TTTTATCT AATTTTCT AATTTTCT AATTTTCT
6551 AGATTTCT AATTTTCT AATTTTCT AATTTTCT AATTTTCT
6601 TATTTTAT TTTTATCT AATTTTCT AATTTTCT AATTTTCT
6651 TTAGAGATG AAAAAATTA CAGAGAGAT ATTTTCTCT CAGAGATTA
6701 TTAGAGATG AAAAAATTA CAGAGAGAT ATTTTCTCT CAGAGATTA
6751 TTAGAGATG AAAAAATTA CAGAGAGAT ATTTTCTCT CAGAGATTA
6801 TTAGAGATG AAAAAATTA CAGAGAGAT ATTTTCTCT CAGAGATTA
6851 TTAGAGATG AAAAAATTA CAGAGAGAT ATTTTCTCT CAGAGATTA
6901 TTAGAGATG AAAAAATTA CAGAGAGAT ATTTTCTCT CAGAGATTA
6951 TTAGAGATG AAAAAATTA CAGAGAGAT ATTTTCTCT CAGAGATTA
7001 TTAGAGATG AAAAAATTA CAGAGAGAT ATTTTCTCT CAGAGATTA
7051 TTAGAGATG AAAAAATTA CAGAGAGAT ATTTTCTCT CAGAGATTA

FIGURE 3, page 2 of 122

10651 GACATTTGTA ATCCAGCAC TTTGGAATGC CGAGGTGGG AGATATGAG
10701 GTCAAGGATG TACAGATG CTGCTAATA GATGAAATG CCATTTAC
10751 TAAAAATACA AAAATTTAGC TTTGCTGCTT GGTAGGCAAT TGTATTTAA
10801 GCTATTTAGG AGGTGATG AGGAGATTT GTTAACTTA GATGATGAG
10851 GTTATTTGTA GTTAAATTA GCTATTTGTA GTTAACTTA GATGATGAG
10901 GAGATTTTGT TTTAAAAAA AAAAAGAAA AAAAAAATA GTTATTTAA
10951 TATGAGATTA GAAAGATTA ATAGGATTA AATAGGATTA GTTATTTAA
11001 GTTAACTTTG AATTTATAT TTTAAATTA GATGATTA TTTAAATTA
11051 GAGATTTTGA GTTAAATTA TTTAAATTA TTTAAATTA TTTAAATTA
11101 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
11151 ATTTTATTTG GTTAAATTA TTTAAATTA TTTAAATTA TTTAAATTA
11201 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
11251 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
11301 TAAATTTTGA GTTAAATTA TTTAAATTA TTTAAATTA TTTAAATTA
11351 TTAAGGATTA GATGATTTA TTTAAATTA TTTAAATTA TTTAAATTA
11401 TTTAAATTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
11451 CATTCTTTG GTTAAATTA TTTAAATTA TTTAAATTA TTTAAATTA
11501 GTTCTTTG GTTAAATTA TTTAAATTA TTTAAATTA TTTAAATTA
11551 AAAATTTG GTTAAATTA TTTAAATTA TTTAAATTA TTTAAATTA
11601 GTTCTTTG GTTAAATTA TTTAAATTA TTTAAATTA TTTAAATTA
11651 TATTTTGT GATGATTTA TTTAAATTA TTTAAATTA TTTAAATTA
11701 TTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
11751 TTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
11801 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
11851 TAAAGGATTA GATGATTTA TTTAAATTA TTTAAATTA TTTAAATTA
11901 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
11951 CATTCTTTG GTTAAATTA TTTAAATTA TTTAAATTA TTTAAATTA
12001 AAAAGGATTA GATGATTTA TTTAAATTA TTTAAATTA TTTAAATTA
12051 GGAAGGATTA GATGATTTA TTTAAATTA TTTAAATTA TTTAAATTA
12101 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
12151 TTAAGGATTA GATGATTTA TTTAAATTA TTTAAATTA TTTAAATTA
12201 TAAAGGATTA GATGATTTA TTTAAATTA TTTAAATTA TTTAAATTA
12251 CATGCTTTG GTTAAATTA TTTAAATTA TTTAAATTA TTTAAATTA
12301 TGAAGGATTA GATGATTTA TTTAAATTA TTTAAATTA TTTAAATTA
12351 GGAAGGATTA GATGATTTA TTTAAATTA TTTAAATTA TTTAAATTA
12401 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
12451 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
12501 ATTTTATTTG GTTAAATTA TTTAAATTA TTTAAATTA TTTAAATTA
12551 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
12601 TAAAGGATTA GATGATTTA TTTAAATTA TTTAAATTA TTTAAATTA
12651 TTTATGAAAG CATATACAA GATGATTTA TTTAAATTA TTTAAATTA
12701 TTTATGAAAG CATATACAA GATGATTTA TTTAAATTA TTTAAATTA
12751 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
12801 TTTATGAAAG CATATACAA GATGATTTA TTTAAATTA TTTAAATTA
12851 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
12901 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
12951 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13001 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13051 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13101 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13151 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13201 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13251 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13301 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13351 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13401 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13451 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13501 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13551 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13601 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13651 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13701 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13751 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13801 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13851 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13901 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
13951 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
14001 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
14051 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
14101 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA
14151 GTTAACTTTG AATTTATAT TTTAAATTA TTTAAATTA TTTAAATTA

FIGURE 3, page 4 of 122

14201 AATTATAGTA CTAAGGATA ATTTCATC TTTTTCGAA CCTAAATATT
14251 TAAATATTA TAATTAT TTTACTGTT ATAATATGAT TTTTTCGATA
14301 TTACAAGCTT TAGGTACTT TTATTCTGT ACATTCATTT TTAATATTTT
14351 CATAAAGG CA TGTAAT ATGTATCTTA ATTATTTTAA GCTTCTCT
14401 TTTATGGAT AGTATAGTTA TTTCCTTTT PTTTCTAATA ACAGTCTTGT
14451 GATATTTT TCAATCAAAAT TTTAATCAT TGTATATACT TGTCTGTGAT
14501 TTTAAAGGAA CTATTAAGGAG AGTAAAGGAA TTTTAAATTA AATTGAATAA
14551 AATTCTATAT ATCTGCAAGAA CTTCAGATTA CTCTTTTAAAT GTAGTTTGTG
14601 ACATTCAGCT GCTCTTAAG CTTCAGAGAG TTTTATATCC AGTTTATGTT
14651 CCAATCTAT AATATCTT TCTAATACCT GATTCTTAAA CTATTTAATA
14701 CAGGTAAGTG CATTATTTG TATGAAGAG CTTCGAAAAA TCAAAATGCG
14751 TAGGTAAGG CAGGTAAGTA TAATTAAATA GCTCTTTTAT CTATTATAT
14801 AAATCTCAT AATCAAAATG TAACATATTA ATTTTATGTT TTTTCTTAGG
14851 AATCTCTTGA TTAATCAATA ATGAATCTAT TTTATGATA GGAATATG
14901 AATCTTAAAG CTAAGTITA TCAAGATCT AAATATATAG CTATGCTAAG
14951 TCTGAAGGTA TTTCTTTTGA TTTATGATTC AATCTATGAA AATGCAAGAA
15001 ATATCTGAT CATAAGGCTT TCTTTGCTT AAGCAATAT TGTATATAGA
15051 AATAGGCGGG AAAGCTCAT TGAAGATTA GCAATCAAGA CTGTTTCTGG
15101 CAAGTCAAGG AAAGCTCAAT AATTGATAG TTTTAACTTC AGGTATAGCG
15151 AAATCTAAGG GCTCTATGTA TGTCTATAG ACTGAGATAT GCTCTCTAGA
15201 TTTTATGCT TACTTTTTT CTAACTGCG TTTACTCTGA GGCATAGATA
15251 TGTCTATAT CAGATCTCAG CACTGCTAGG CTTCACCTGC CCAGCTAGAA
15301 GTCAGTGA AAAGCAATCT CTCTTTTCT AICAGTTTGA CAAATCTCT
15351 GGGCTGATG TATTCTGATA AAATTAAGTA CACATCTCTA TTTCTGAATA
15401 TGAATAGTG GAGGATAT TGTAGTCTTT TCTTCTGAT GGGCTTAGTG
15451 AAATATCAT TTTTACAGCT TGTCTAGTG AGAAGAACTA AAGATTTG
15501 GATTTAAGCG AGCTCACTAA AATCATAGG ACATGCGGGA GGAATTAATC
15551 CTCTAAGGAG AATCAGGATG CTATTAATA AAGATCTGAG ATTGAATCT
15601 TGAAGGCTAA AATCATATA TATATATAT TTTCTTAT AAGCATATAT
15651 ATATATAGT TATCTATATA TAGATGTAAG TGTATTTAT GCTATTTTA
15701 TGTATTTAT GTAAATAAAT ACATTTACT TCTCTATATA TATATCTAT
15751 CTATATATAG ATCTCTCTA TTTCTATCT TTTTGAAGAA GAAATTTAG
15801 AATAGGCTGA GCTGAAGCTA TGAAGCTAA AATCAATAT GATTAAGTCA
15851 GAAAGGCTAG CATTGAGCTA AGCATATAGA AGGATTTCTG GTGCTAAGT
15901 CAAAGTCAAG AGTCAAGCTA GGAAGGCTT CTGAATTTCA GGTCTCTGAG
15951 TTAATCAAGG CTGAGGCTT CTCTGCTAAT CCTCTCTGAG CCAAGGCTAA
16001 AATCTGCTG AGCAAGCTT TGAAGGCTT TACTATTTA CCAATATAGA
16051 AGGATCTGAG AGGCTCTCT TCAAGGCTT TCTGATAATA AGTTGAGCTT
16101 GTCTCTCTA AATCTCTG TCACTCTAG GCAAGCTAT TCTCTCTAG
16151 TGAATAGGAT ATTCTCTCT CTATCTAAG AATCAAGCTA TTTCTGCTAA
16201 AATTTTAACT AATCTCTCT GGAATCTG CTCAAGCTT SATAGCTTA
16251 CCAATCTGTA TGTAGCTT TTTAATTT TTTCTCTCT TCTAGTTT
16301 GCAAGGCTAG AAAGCTCTCT TATACTGAA GAGGCTAG GAGGCTAG
16351 GATCAAGCTA AGGAGCTTT AATCTCTTT AAGCAAGCTAG AGATTTAAG
16401 CTGCTCTCT TCAAGGCTA ACAGGCTT ATGCTCTTT TACATCTCT
16451 ATGCTTTTAC AGGCTCTGTA TATCTAAGTA CTAACTCTA TCAAGGCTAA
16501 GATCTAAGT ATTCAAAAGT GCTTTAGCTA CAAAGGCTAA CTGATTTGAG
16551 GGAAGCTGTA TTTGTTTAT CAATAATGTA TATTTCTGTA GCACTCTGCT
16601 AGATGAGAT ATTATTTCT AATTTTCT CTCTCTCTA AATCTCTG
16651 GAAAAAATA TAATCTCTG CTCTATTAAT CTCTATTTG GCTATTTGAC
16701 ATCTCTCTG AACTTATGTA TTTTATGATA TTTTGAAGC AGAGATTATG
16751 AGAAGAAAT GCTCTCTGTA GCTCTCTCT CTCTATGAA AGGTAAATAC
16801 AATCTCTGTA AGCTCTCTG TCAAGCTGTA GCTCTCTGTA TAAATTTGTA
16851 AGATGCTA TCTCTCTGTA CTCTCTCTA TGTAGCTT CTCTCTCTG
16901 CTCTCTCTA TATCTCTGTA AATTTCTAA TGTCTCTCT TCTCTCTCT
16951 GCTCTCTCT AATCTCTCT AATCTCTCT CTCTCTCTG CTCTCTCTG
17001 AATCTCTCT GAAATCTGTA GATCTCTCT TCTCTCTCT GATCTCTCT
17051 TCTCTCTCT AATCTCTGTA AATCTCTCT TCTCTCTCT AATCTCTCT
17101 AATCTCTCT TCTCTCTCT AATCTCTCT TCTCTCTCT AATCTCTCT
17151 AATCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT
17201 AATCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT
17251 TGAAGTAAAT TCTCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT
17301 TGAAGTAAAT TCTCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT
17351 ATCTCTCTA AATCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT
17401 TCTCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT
17451 AATCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT
17501 AATCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT
17551 CTCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT
17601 AATCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT
17651 CTCTCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT
17701 ATCTCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT

FIGURE 3, page 5 of 122

24851 GAAAAAATG GAAATAGGAG AATCGACCTT AAACCTCAAT TTTGTGCTG
 24901 ATTAACATAT GATCCTTGGG AACCTACGGA TGTGTTTTTT GTTTTASTTT
 24951 CCTTATGGA CTTGAGTAA TTTAAAGGCT TCTATTCTCC TATGATCTTC
 25001 TGTAAAGAG ATCATAAAGA GTAGTCAATTA TGAATCAGA GTTTACTGTT
 25051 AATCTAAAT ATCATATTAA TTTCTTAGC CATTTTACAG GTGTGAAAC
 25101 TGAATAAAA TTTTAAATA TCTCT-CTT AGTTTTTATA CTGTAAAT
 25151 GGGATTAATA AATAACCTTA TCAATACAG TCTTAAAG TATGAAATTA
 25201 AAAATTTT GTGAAATCT GAGTCAAGG TCTATTATAT TCACTAATTA
 25251 TTAATTTAT TTTGTTTAA CAGCATTTT TACTTCCC TAAACAGCT
 25301 GCTAAAGAT AACTTAAGC CTGGTTATG TGGTCTAAA AAATTTCTAG
 25351 ACAATTTGA TCACTCAAT GAAATCTT TGAACCAAG SAATGTTTT
 25401 CTGCTGCTT AGGTGGCAAG CATCAACTT TCAACCAAGT AAAATCTTCT
 25451 CTCTTAAAG CATTATTGC CATAATCTTA TCACTCTT TATGCTTTT
 25501 TACAAATTT TTTTCTTT TCTATGTTT TGGGTTATA TCAAGAAAT
 25551 CATTATTTAG ACAAATGTC CATGTTTTT CCGCTATCT TTTCTCAAT
 25601 CGTTTTTAA TTTAGGACT TACATTTAG TATTTAATC ATTTTGAAT
 25651 GATTTCTGT TAAAGGATCA GAAACGGTC CAATTCAT TTTCTGATG
 25701 TGAATAGGCA GCTTTTCTG CAGCATTTT TGAAGAGACT ATCTTTTCT
 25751 CCTTCTGTC TCTTGGCAC TTTGTAGAA ATCAGTTGAT CATAGATTT
 25801 TACGTTTAT TCTTAGCTGT CTATCTATT CCAATGCTT ACATATCTG
 25851 TTTTATCTA GTACCATGCT GTTTTGATTA GTATAGCTT GCAATATAT
 25901 TTTAAATCAG ATCATCTGAT GCTTCTGCT TTTTCTTCT TTAATAATG
 25951 TTTGCTGTT TGGGATTTT TTTAGTTTC ATCAAAAT TGGGATTTT
 26001 TTTCTTTCT CTGAAGAATG ATGTTGAA TTTGAGAG ATTTGATTA
 26051 ACAAGAAAT TAATAAGCT ATTAATAATG GGCAGAAAG TTTGAATGAG
 26101 ATTCTTAAA AGAAGGATA CAATAATGGA CACATAGAT ATAAAAAAT
 26151 GTTCAATATC ATTAATCAT AGAATAATG AAATTAATC CACAGCATA
 26201 TATCACTCA CACTTTTAG AATGCTATTA TCAAAAGAT TAAAAAAT
 26251 AAATGTTGT AAGGATGTGA AAAGAAAGG AAACCTTCT ATACTGTTG
 26301 AAATATCTA AATTATTCC CTCACTTTAC AAAACAAT TGAAGTTCT
 26351 CAAAAAATTA AAGCAGAAAT TATCATGAT CAATCAATG AATCATGTA
 26401 AACTTTTAA GTTCTGGGTA TATATCTAA GAAATTAAT TAAATATCT
 26451 AAAGAAATAT CTGCACTCTC ATGTTCTAT CAGCATTTT TCAATAGCT
 26501 AAGATATCTA AACAACCTAA ATGCACTCA ACAGATCTA GGATAAAAA
 26551 ATCTCTATT GCTACATAAT GAAATACTAC TGAGACTTTA AAAAAAGAG
 26601 AAAATTTCT TATCTCTGAC AAGATTAATA TAACTAGAG ACATCATCT
 26651 AACTTAAATA ATCAACCTAC AGAATTAATA ATATTGATC ATCTATTCA
 26701 TATCTAAAT CTAAAAAGCAT CAATCTCTA GAATTAAGA GTAGAACTG
 26751 GTTCTAGAG GCTTGGGACT TGGGCTATC GTTGTCTAA GGCATAGAG
 26801 TTTCTCTAG ACAAGAGAA TAACTCTCTG TGAATATCT CAATTAAG
 26851 TCACTCTAGT TAATAATATA TTACTATTT CAAATTTCT AAAAGACTG
 26901 AATTAAGAT TTTCTCTAC AAAGAAATCA CAAGTATCT AGTTATGAA
 26951 TACTTAAT AGCTCTATT GTTCTGCTA CAATSTATAT GTTATTAATA
 27001 AGAATTAAT GTAAACAGAA AATAGATATT ATTTGCTAA TAAAAAATA
 27051 TTTTTTAAAA AGCTATTTT TCTTCTTAA TCCCATCTG CTCTGGGCT
 27101 AAGCTATATG TTTTITATA CAGATTTCT TCCAGCTAG TCCGCTTCT
 27151 AATAAGATT AATGCTCTGA AGCTGCTCA ATGCACTAAC AGATCAAGG
 27201 TCTCATAGAT TAATAGAACT CTACATATC TAGCTCTGCA CTGCTCTCT
 27251 AATTTTAA TCTCACTACT TCTGAGCTT AAGGTGGGCT GATCATAGG
 27301 TCACTGATTT GAGGCTATCT TCTCTAAAG GGTGAAATCT TCTCTCTAT
 27351 AAAAAATCAA AAAATAGCT TGAATGCTG GGGGGGCTG GTAATCTAG
 27401 CTCTCTAGAA GCTAAGGCTA GGAGAACTCA TTGAATCTG GAGGCTAGG
 27451 TTTCTAGAG CCAAGATCAT AACTCTGCT TCCAGCTCTG GAACTGAGT
 27501 GAGACTTTGT CTAAAAAATA TAAAAATAG AAATCTACT TATCTACTC
 27551 TCACTCTATA ATATGATAAC TACTTCTTT AATTTCTCAT TGGATAATA
 27601 ACTTTTATA AATCTTACT TCTCACTCT ATGCTCTGAG TCTCTGCTT
 27651 AAAAAAATC CTCTCTATT GCTCTATCT CTAGTCTCAT CAATCTGCT
 27701 TCACTCTAT AATCTCTTT GGGGAAAGG GAGTCTCTA TAATCTTAT
 27751 TTAATTAATA AAAAAAGCT AAAAAAGAT AATGATCTT AAAAAAGAT
 27801 AATTAATTA TAACTCTGTA AAAAAAGCT GATTGCTCT GCTCTCTAT
 27851 TATCTCTT TCTCTCTGTA TTTCTCTGTA TCTCTCTCT GCTCTCTAT
 27901 TCACTCTCT TCTCTCTCT TTTCTCTCT TCACTCTCT TCTCTCTCT
 27951 TCACTCTCT TCTCTCTCT TTTCTCTCT TCACTCTCT TCTCTCTCT
 28001 TCACTCTCT TCTCTCTCT TTTCTCTCT TCACTCTCT TCTCTCTCT
 28051 TCACTCTCT TCTCTCTCT TTTCTCTCT TCACTCTCT TCTCTCTCT
 28101 TCACTCTCT TCTCTCTCT TTTCTCTCT TCACTCTCT TCTCTCTCT
 28151 TCACTCTCT TCTCTCTCT TTTCTCTCT TCACTCTCT TCTCTCTCT
 28201 TCACTCTCT TCTCTCTCT TTTCTCTCT TCACTCTCT TCTCTCTCT
 28251 TCACTCTCT TCTCTCTCT TTTCTCTCT TCACTCTCT TCTCTCTCT
 28301 TCACTCTCT TCTCTCTCT TTTCTCTCT TCACTCTCT TCTCTCTCT
 28351 TCACTCTCT TCTCTCTCT TTTCTCTCT TCACTCTCT TCTCTCTCT

FIGURE 3, page 8 of 122

31951 TCTGTTTCTT ACAATGCTG TAACTTTGGG CCAACTTCTT AACCTATTCA
32001 ACCTTTTCTT TCTTTTCTT TGAATAAGA AATTGATTTT CTACTTCA
32051 TGATTCTAGS CGAACTTCTT AAAATCAAC GTAAATATTA GTAATGATA
32101 TAATAAATAT ATAAATATAT AACATCTATT GAGCAATTAT ATTCTTACT
32151 TTCACTGCTT TATTCTATT AATCATGAAA GATCTCTAT GAAAGCATA
32201 ATGTTTCTAG CCACTTTTA TAGATTATTA AAAAGAGCTT TTAGTAAAT
32251 ACTAACTTAA CCACTTTTA AAAAGAGCTT GAAAGAGAT TTGAATTTAG
32301 ATCTCTTCTA TCTTTTAACT TATTACTATT AATTAATTA CCAAGAACTG
32351 AAAAATTAAT GAAAGAACT CTGAGAGT A TCTGATGAA ATGAGTAA
32401 TGAAGAGAG GAAAGAACT GAGCTCTT GCTTAAAGCTT TCTTAACTT
32451 GCACTAAAGA TGAAAGAT TTGAGATAG CATCTCTGA GTGAAGATA
32501 TGCTTAACT ATCTAAAGA CCACTGAGAG TGAATTAAG TTTAAAGCT
32551 AGCTGAACT TTCTAAAGA AGAATTTAT GAGATTAAG CATCTCTGA
32601 ACAGAGAGAG GTATTAAGA CCAAGAGAG AGAGTAAAG CCAAGAGCTG
32651 AGCTGAGAG CTGAGATTTT TAATGAGCTT TGAATTTCTT CTGAGCTG
32701 AAAGTAAAT TTATTTAACT TGAAGAGCTT GCTTCTGAG AGCTGAGAG
32751 CCACTTTGAG GAACTTAACT TTGAGATTTT GCTTCTGAG GGAAGAGAG
32801 ATAGATTTT CCAAGAGAG AGAAGAGCTT GCTTCTGAG GCTTCTGAG
32851 GAGTCTGAG AGAAGAGCTT TGGGTGCTG GCTTCTGAG GCTTCTGAG
32901 AGTCTGAG GGAAGAGCTT TGGGTGCTG GCTTCTGAG GCTTCTGAG
32951 GAGTCTGAG TGGGTGCTG AGTAAAGAG AATAATGAA ATATATGAT
33001 AGCTGAGCTT GATTAATTTT TAATGAGCTT GCTTCTGAG GCTTCTGAG
33051 AGCTGAGCTT GATTAATTTT TAATGAGCTT GCTTCTGAG GCTTCTGAG
33101 TTATAGAGAG CCAAGAGCTT AGATTAAGT TGAATTTAT GCTTCTGAG
33151 TGGGTGCTT GCACTTAACT TGGGTGCTT AGATTTTAT TGAATTTAT
33201 AATATTTAT AATTTGATTT TGAATTTAT TGAATTTAT TGAATTTAT
33251 TATATTTAT TTTTCTGCT GACATATTT TGAATTTAT TGAATTTAT
33301 ACTGAGAG CCAAGAGCTT AGTCTGAG TGGGTGCTT AGAAGAGCT
33351 CCTGTAATTT TTTTCTGCT AGTCTGAG TGGGTGCTT AGAAGAGCT
33401 TAACTGAG AGTCTGAG TAACTGAG TAACTGAG TAACTGAG
33451 ACTATTTCT AGCTGAGCTT TAACTGAG TAACTGAG TAACTGAG
33501 CTGAGCTTT TGAATTTAT GATGCTTAT GTAAGAGCTT AATGAGAG
33551 CACATAAAG GTTAAAGAT CTAGCTGAG CCACTGATG GCTTCTGAG
33601 GTTCTTATTT TGAATTTAT AATGCTGAG GTGAGCTG CCACTGATG
33651 ATCTGATTT TGAAGAGCTT TGAAGAGCTT TGAAGAGCTT TGAAGAGCT
33701 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
33751 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
33801 AATCTGAG GCTTAAAT AATCTGAG AATCTGAG AATCTGAG
33851 AGTCTGAG AATCTGAG GCTTAAAT AATCTGAG AATCTGAG
33901 TGAAGAGCT AATCTGAG AATCTGAG AATCTGAG AATCTGAG
33951 GCTAAAGAG GTTAAATTT AAAAGAGT GAAAGAGT AATCTGAG
34001 CCAAGAGCT GCTTAAATTT AAAAGAGT GAAAGAGT AATCTGAG
34051 TGAAGAGCT GCTTAAATTT AAAAGAGT GAAAGAGT AATCTGAG
34101 GCTAAATTT AATCTGAG AATCTGAG AATCTGAG AATCTGAG
34151 AATCTGAG AATCTGAG AATCTGAG AATCTGAG AATCTGAG
34201 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
34251 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
34301 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
34351 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
34401 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
34451 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
34501 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
34551 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
34601 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
34651 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
34701 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
34751 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
34801 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
34851 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
34901 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
34951 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
35001 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
35051 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
35101 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
35151 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
35201 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
35251 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
35301 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
35351 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
35401 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT
35451 TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT TGAAGAGCT

FIGURE 3, page 10 of 122

35501 TACTCTAGG GCTGAGGAG GAGAAATTCT TGAATCTGG
35551 AGGCGGAGT TGAATGAGG CAAGGTCAC GAGCTGACT CCAGGCTGGA
35601 AACAGCTGA GAGTACTTT AAAAAACAA AAGGAATTCT TGGTACAGAG
35651 TCTAAAATC TTTATGATAA GAAATTTCT AATGATAGA GTGTAGSAT
35701 TATCTTTGA AATCTTTAT TTTGAGAG GTCTTTTGA CTGGATACAA
35751 ATCTTTTCT GTATGCTTT TGTAAAGAA TTTATTTTA AGGATGAATA
35801 AACTTTTAT GTTTTGGAG TAGCTTTT TGTATTTAA CTTATTTAAT
35851 TCTAATTA AGCAATTTA AAAAAATAT GATTAATAT TGAATTAAT
35901 TCTCTTAT TATTTGATAT AGTGTCTTT TTTTAAATG GATTAATAT
35951 TGAAGCTGA GTTGTATTA TTTTTTAA TGAATTTAT AGCTCAAGG
36001 TTTATTTT TTTTATTC AGTGTCTTT GATTAATAT AGCTCAAGG
36051 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36101 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36151 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36201 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36251 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36301 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36351 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36401 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36451 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36501 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36551 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36601 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36651 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36701 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36751 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36801 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36851 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36901 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
36951 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37001 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37051 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37101 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37151 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37201 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37251 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37301 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37351 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37401 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37451 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37501 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37551 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37601 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37651 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37701 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37751 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37801 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37851 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37901 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
37951 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38001 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38051 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38101 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38151 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38201 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38251 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38301 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38351 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38401 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38451 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38501 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38551 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38601 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38651 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38701 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38751 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38801 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38851 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38901 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
38951 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT
39001 TTTTATTT TTTTATTC AACTTTTAT GATTAATAT AAAAAATAT

FIGURE 3, page 11 of 122

39051 TGAAAAATGTS GAAATTTGCT TAATAAATGT AGAAGAGTCT TTTTGTATAT
39101 CTTCGCTTGT GAAATGGAAC ATTTTTSAG ATTTTATCTG TGTGAGTAAT
39151 TGCAATGTTG GTATGAGGTT ATTGAGTTTC TTGATTAATG TGTGAAAAAG
39201 ATTTAAGTTG TGATGAGGTT ATTTGAGATG ATTTGAGATG TAAAGCTTAG
39251 TGCAAGATAT TAATAAGAT AGTTATATAT ATTTGAGATG TTTATTTTCT
39301 GATTTATGAC TTATGAGTGA CAGTTATTTT GCAATATTTT GTTGTAGGTA
39351 TGAAATGTC AATAGTATG CTGAGTTT ATTTTGTGA AAATGTGTAT
39401 GTATTAATG AATATTTTAT TGTATAGT GATTTATG TGTATTTTCT
39451 ATTTTATTTT TTAAAAAT ATATAGATAT TATTTTATG TGTAAAAA
39501 AAAGAAATAT TGTTTTTA AAATGATAT AATATTTT TAAATTTTCT
39551 TTTTATTTT TTGTAGAA TATTTTTT GTTTTTAT CTTTTATGAT
39601 TTCAATATTT GTATTTATG TGTTTGAT TGTGTCTTC AGGATTATAG
39651 CCAGAAATAT TTCTGCTG CTCTTAACA TTTTAAAAA GACTATTCTA
39701 GTCTGCTT TTAAAGGCTAC AGCTTAGAG GATTAAGATG AGTTTCTCAA
39751 GCTTTATGTT GTATGAGAT CAGCTGGAAT ACTTGTAAA ATAGAGCTTG
39801 CAAGGCTAAC GTATGAGAT CTGATTTGAG AGGTTGCTG TGAAGGACAG
39851 AATTTATAT TGTATGAGT TGTAGGCTG GTTATGCTG CTGCTGAGG
39901 GAGTATGTT TGAAGATGAC TGAAGTAAAT GTTTTCTCT GTTTTGAACA
39951 ACATTTCTAT CTGTGCTTC CTGATGCTG ITGGAATTT TCCACAAAT
40001 TTGAAAAAT GTTCTGCTC CAGTCTCTC TGTATAGTA GACATGATAT
40051 TCATGAGAA AATAAGGAT TCTGTATAT GTTTCTCT CTCTTCTCTC
40101 AGGCTCTTC TGTCTGAG CATTTCTCA CTGCTCTCT GCTGAGTGTG
40151 TCAATGAGT GATTTATG CCGCTGCTG CTGGAATTA TGTCTCTCTC
40201 CTAAATGTT ATGCTGCTT GATAGGCTG GTTATAGAG TAGATATAGA
40251 AAGAATGAAT GAGTCTCT ATTTTCTGA CTGGAATTA TGTATAGT
40301 GTATGCTGAC TGAAGATG GATATGCTG TTTCTGCTG AATAGAAAC
40351 AATTTATGTA GGTCTCTCA CTAGGCTCT GTTCTCTAT TTTATGTTAA
40401 TAAGAGCTCT TGTATGAT TATGCTCT TATTTATCT ACTTGTCTT
40451 CACAATAAGA GGTATGCT GCTTCTCT CAGGCTCTG GTTATGTTAA
40501 TATATTCTCT GATAGGCTG TGTCTGAG AATATCTTC CCAATGCTA
40551 GTTCTCTAG AGGCTCTAG AGGCTGAGC TTAAGCTAAC AATGATTTAT
40601 CTTTCTGAG AATATGCT TGTCTGAG GAGGCTCTG TTTCTCTTA
40651 AGGCTCTAG GGTATGCT TGTCTGAG TGTCTGAG AATATCTTC
40701 TCAGGCTCTA GATAGGCTG CTGCTGAG CTATGAGCT TCAATGCTA
40751 CTGGAATCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
40801 CTGGAATCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
40851 CATAAATCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
40901 AATATGCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
40951 AGGCTCTAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41001 TGTCTGAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41051 TGTCTGAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41101 GATATCTTC TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41151 AATATGCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41201 CTGGAATCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41251 TGTCTGAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41301 TGTCTGAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41351 GATATCTTC TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41401 CTGGAATCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41451 TGTCTGAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41501 AATATGCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41551 AGGCTCTAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41601 TGTCTGAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41651 CTGGAATCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41701 GATATCTTC TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41751 TGTCTGAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41801 CTGGAATCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41851 TGTCTGAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41901 AATATGCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
41951 AGGCTCTAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
42001 TGTCTGAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
42051 CTGGAATCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
42101 GATATCTTC TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
42151 AATATGCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
42201 AGGCTCTAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
42251 TGTCTGAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
42301 CTGGAATCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
42351 GATATCTTC TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
42401 AATATGCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
42451 AGGCTCTAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
42501 TGTCTGAG TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA
42551 CTGGAATCT TGTCTGAG TGTCTGAG GATATCTTC TCAATGCTA

FIGURE 3, page 12 of 122

53251 CAAGAAAAGT GTTTCAGGT ATGGGACACA TACCTAGAAC TGTGACATT
53301 CATCTTCAAA CTTAAATTT GGGGATAGG TTGATCCTG ATACTACTT
53351 CTCTT ATTC CAATCTGTC TGTCTTTTG GGGGAGCTG TTCTTCTGA
53401 TGATAAATAA GTATTAAACG TAGGCTATT ATAGCTCAGG COTCAATGA
53451 AGTGTATATG CCAAACTGCT TATCTTTAG AGATTAATG TAACCAAAAT
53501 TTCTTATC AGAAAGATAT CAAAGAAIAA ACTTATTGTC TATAAATAA
53551 AGAATAAIAA GTCTATAAG TAAATTTCT ATGCTCTGCG TACATCTCTG
53601 ACTTTATAGA CAGATATTGA ACTCTCTCTT TTCTCTTTA ATTACTGAG
53651 AGTCTAGGAA CAAATATGGA TACCAATTCT GTCTCTTTT TAAAGGAATA
53701 ACATCAAGAT AGAATTTGCT ATATTCTGAT CATGCACTTA CTTAAATCT
53751 ATAAATAATG AATCTATG AGAATCTCTT GACAGCAGT GATCTAATT
53801 GGGAAAGGAT TCTTTATTTG CATACTATG AATTATCTA TTTAATAAG
53851 GTAACTTTT ACAAATTAAT GAGATATAGG AACTAGAGAA AATAATCTA
53901 TCTCTAGAT TGAAAGTTTA CAGCAATAT ACATCTGAGT GAATTAAGAA
53951 TCACAGAGCT TAGCTTTTCT TGTCTTTT TGTAGCTATG AAGCTCTGCT
54001 TAACTTATTT TCAATTTCTA TCAATCTCT CATCTGAGT CTTCTAGAA
54051 GATTTCTTTA ACCATCTCTT CTTCTCTGAG TGTCTGAGG TGTCTCTCT
54101 ATGCTCTCTT ATAGTCTCTT TTTTCTTAT TTAATCTAT ATATTATAAT
54151 AGTTATATAA ACATCTCTCT CTTCTCTTAA ATTATCTGAG TAAAGTATG
54201 TGATTAAGAA CAAAGATCTT ATAATCAGAG AGATATCTG TGAAGCAGG
54251 GTTCTCTCTT CACTAGCTA TGTGATAAAA ATACACTCTT TACAGCTATG
54301 TCTAACTCT TAAAGTATAA TAAAGCAATT AGCATAGAGT ATGCTCTATA
54351 ACTAATAAT GTTCTCTCTT TTATTTTCTG CTTTATAGCT ACATCTCTA
54401 AGAATATCT TAACTATCT GGTAGAGAGG TGTCTCTGAG TGAATCTGAGT
54451 GGTAGAGAGG TGTCTCTGAG TGTCTCTATA CTTGAGTCTA GGTAACTCTG
54501 GGTAACTCTG AATCTCTGAG ATCTCTCTA CTTGAGTCTA AATCTCTGAGT
54551 GGTCTCTCTT GTCTCTCTG TGTCTCTGAG TGTCTCTGAG ACAAATCTGAG
54601 ATGATAAGAA TCAATCTCTA ACATCTCTGAG AGATCTCTA ATCTCTATA
54651 CAGCTCTCTG TAACTATCT TGTCTCTCTA TTAATCTCTA CTTCTCTGAGT
54701 TCTCTCTCTT ATGCTCTCTA TGTCTCTCTA TTAAGTCTG TGAATCTGAG
54751 TTTCTCTCTT TCAATCTCTA TGTCTCTCTA TTAAGTCTG TGAATCTGAG
54801 AAGCTCTCTG TCAATCTCTA TGTCTCTCTA TTAAGTCTG TGAATCTGAG
54851 TGTCTCTCTG TGTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG
54901 AGGAGTCTGAG CAGCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG
54951 TTTCTCTCTA AGGAGTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG
55001 AAAAACTCTA AGGAGTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG
55051 CTAAGTCTA AGGAGTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG
55101 TATCTCTCTT TGTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG
55151 AAGTCTCTG CTTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG
55201 AATCTCTCTA CTTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG
55251 GGTCTCTCTA TATCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG
55301 TGTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
55351 AGGAGTCTA CAGCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG
55401 CAGCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
55451 TGTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
55501 TGTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
55551 AAGCTCTCTA CAGCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG
55601 CAGCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
55651 CTTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
55701 TGTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
55751 TGTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
55801 AATCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
55851 TGTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
55901 AGGAGTCTA CAGCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG
55951 TGTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
56001 AAGCTCTCTA CAGCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG
56051 GGTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
56101 GGTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
56151 ATCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
56201 CAGCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
56251 CTTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
56301 TGTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
56351 TGTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
56401 CTTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
56451 ATCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
56501 TGTCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
56551 CAGCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
56601 TAACTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
56651 CAGCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
56701 CAGCTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA
56751 TAACTCTCTA TTAAGTCTG TGAATCTCTA TTAAGTCTG TGAATCTCTA

FIGURE 3, page 16 of 122

60051 AGCTCAGAG TGAGATATTT AGGTASCAAA TACGTCTGAT GAACCTAAAG
60061 AGTTAAATAT CAGCTAATCA GAAATGAGC TCCCTCTCTT TCCAAACAGG
60071 TTAAAAATG GTTCTTTCAA CCAAGCTGGA TAATTAGAT GGTACGATT
60081 AATGATCTT GTTCTCATCA TTGTTCACTG CCAAGATAGG CCAACACTTT
60091 GAAATATTAG TAATCAGGTT CACTGATTTT GTTCTCAGST TTGAAACAGA
60101 GCTTGGAATA ATACATTATT ATTCTGATAT CCTTGAGAAT TCTTTGCCAC
60111 CTGAAAGAT AGAAGCAAGG TCTTGAGAGG TTAAGATGTA CCACTGGGTT
60121 TTATTAAGCA AAAAGAAAGA AAGCTATAAA TTAAACTCT GAAAACTCA
60131 GTACCTACCT AGAAATAGCA ACAAATGAG ATTCACTCT GGAAGAAAGG
60141 TCTTTAGAT TTAGAAAGT TTAGGATGAA ATTCTTTTA TTCTGGTCT
60151 GAGATCAGAA AGTAAATTC TAAAGAGCTT AAGTAAGCA TATCAAAAA
60161 STGTCAAAA ATGGGCAAGG AATGGACTCT GCTATTTTCT GGAAGAGAAA
60171 ACGATTTCTC CTCCTTTCTC AAAAAATTC CAGGAACTTA ATTCTGAGC
60181 AACCACTTG TAAATGCAA GCATCTCTCA AATATCTA GAAATTCCAA
60191 GAAATTTTT TTTCTACTCT TATGATGCTC AAGGAGATA GAAGGCTGGC
60201 TTGAAAGTG GACTCAGCTT TGAATTCGAA AATGCTCTC ATTCTTTTA
60211 TGTGGACTA AGAAAAATAT ATTATCCATC TAGGCACTTG CCTCTCATC
60221 ATTAAATAAG AAGTAGAGAG GGTATACACT AATCATCAGG AATTCACTT
60231 CTATCTGTTA CTATCGGTAT GAAATGAGT CATCTTTTAT ATCTCTTGA
60241 GTCTCAATTT CCACTCTTTA AAATAGAGAG AAAAAATCT TCTTTAGAG
60251 ATTCTATTGA ATATTAAAT AATAGAGCT ATAGAGAAAG CTTAGCTAG
60261 GATCTCTGAC ATGGTTGCTG TTTAATAATT ACAATCTCA GCGGCTGTT
60271 TATTTTCTT TCCTTCTGAG CTCCAATTTA TTCTATCTA GCGCTAGGG
60281 CTATATAAT ATGCTAAGAT ATCTCTATTT CCAATCAGG AGCTGAGTCT
60291 ATCTCTGGCT AAAGAGCTGT ACACACAGCT GTCTAGAGG ATCAAGAAST
60301 ACAGAGCTAT GTATGAAGG CTCTCAGGCG GTGAATGGA GAGCTAAGA
60311 GTAGAGGAG GCATTGGGGT GGGCTTTTAA AGATGAAAA AAAAATTAAG
60321 GTAGGCTAGG AGCAGAAGCA CTCAGATAAG GAAAAAATG CACAACCTGT
60331 TGGATTAAT GTTACTATTA TPGCTTAAAT GGCACAACTG TTGGATGAA
60341 TTCTTACTAT TATTTGACTT ATTCTAATAG GTACAATCTT TAAGGTAAAG
60351 GAAAAAAGCA TATTGCAAG TAGAAGCAAA TCAACTACTG CTAGAAAAAT
60361 TAAAAATCTT CTTCAATATC AAGGTAGAAA AAGTTAGCA TCTTCAATTT
60371 GCTACTAATA TTCTGAAGCT GGACAAATAA CTITACTCTT TCTCAGCTA
60381 AAATGAGGAT GAAATCTTA AGCTCTCTAT CTTAATAGGA TGTGTGAAGA
60391 GAAAGTACAG ATTTGACAGT CCAAGCTGCA GAGTTCTTAA TTGAGTAGGT
60401 CTGGGCTTGG ATCTAAGAAAT TTATATCTTT TTTTATTATG ATGATGATTA
60411 TTATATTTTA AGTTTASGG TACATGCTCA CAATCTGAG GTTAGTTACA
60421 TATGTATACA ATGAATTTAT ATTCTTAACA AGCTTCAAG TGATGCTGAT
60431 ATAGCTGCTC TGGGATTTAG AGTAAGAAAA CCACTGCTTT AGGTCAATGC
60441 AGTTTTTTT AAAAGCTATT ATTCTAATCT GGTAAAGS TCAATTAAGT
60451 GTGATTTATG TTTTATTATG TCTCTAGACT CTGAATAGT TACTTAGGAT
60461 ATGCAAAAT AGAAGATCTA ATATTTTCTG TAGATTTCTT TACACCAAT
60471 CGGCTTCTCT CCGTATGGA TAGTTAATGT ATGTCTTCTT TTTATTTCTC
60481 TTCTCTGCTC TCTAGTCTC ATTAGAAAGA TATAATTTA TTGAAATCTT
60491 CTAGAATGAT ATTATTCATT GGAATAAAAT CGATCTTTT TACATTTCTT
60501 TTTGTTTTTT TGTTTCTTAA TCAAGAGGCT TATGATCTCT AAAGGACTTT
60511 TTATTTTATT TCATTGAAAC CTTTATAGA AACTGCACTT TTCATCTGAC
60521 CACTCTGAT TTTCTGCTC ATATGACAGG ATTCTGACT AGCTTTTAAA
60531 GCTCTCACTT TGGATGGGAT TTGATTAAT GGAAGAGAGG AGATAGCTCT
60541 GTAATATAGG CTACATCTCT CTTGCAATAT CTGAAATGAA CTGATTCAT
60551 CATCAGAACT GTAAATCACG TTCAAGAGG TCTTTCTGCT AGGAGTAGTT
60561 TTTGCAATAT TCAATAGGCT TTTGCTGTAG TACATCTCTG TCTCATGAG
60571 ATTACAGTCA ATCACTATGC TTTCATAGG CATCTCTCTG CTTCAACCTC
60581 TGTCTTCTG CTGCTGCTA GCTTCTGAG TCTTTCTTT GAACTTTCTT
60591 GAGGATAGT GTTTCTCAGG ACTTATCTTT AGTATCTTAA AGAGCTTTT
60601 CTTCTCTGTA TCATGATACA TTGTAAAGTA TCTGCTTTT TTTTCAAGG
60611 GAAATATA TAATCACTCT AATTCTTCTA AGAAGAGAGG CAGAGAAAGG
60621 CTTCTCTAT CCAATCTGAA GAGTCTAT GCTCTATCTA GAATGAATCA
60631 TACTTTTGA ATTCTCTGCT AGTCTTTCTT GAGTCTGAG TCACTCTCT
60641 TCTATCTCTA TATCTGTAGG CCTCTTTCTT CTGATCTTAA GCTTCCAAAC
60651 TCTCTCTCTA TGGATGCTAT CCACTGATTT TATCTCTAG ATAGCTTTT
60661 AAGAGAGAGA GAGAGAGAAA TTGAATTTG GATCAAGAT ACAGAGAAAC
60671 ATCAATAGAC TTGAAATAGA AATTCTGAT TTCTCTTAAA AAAAGAGAAA
60681 AAAAAAGAAA GAAGCTTTGG CAGTATCTGA CTCTATCTT TAAGGTAAC
60691 AGCTAAATGC TGGGATGCTC CTGTAAGAG CCACTCTCTC CAGTTTCTG
60701 CTCTCTATAT CAGCTCTCTT GACTCTTTTA CATTATTTG TTGATCTCTA
60711 AAGGATCTC AATTACTGCT CTCTTTTCTT TCTTTCTGCT AAGTTCTACG
60721 AATTACAGAG TTTGAAAGCT AAAGGAGTCT CTGAAGAAA GATTTTCTA
60731 AATCTATCT ACATCAAAAT CAGCTATGCT CTATAAGAG CTTGATCTCA
60741 GTACCAATTA AATAAGATC TCTGAGAGG ACAAAGCTCT GAGATTTT

FIGURE 3, page 18 of 122

63901 TTTTITTAATT TCCAGATGA TTCCAGTATA CAGATCAGTT CATCTAAGAA
63951 CCACTATGTT GGAAGAAATG TACTAGAAAT TTATTGTGA TATAAATGAC
64001 CCGAGATTTT GTTAAATATG AGATTGTG GGGGCAGGCT CTAAGGCTTA
64051 GCAATTTTGA CAAGCAATG CTTCTGTG CCAATCAAT TTTTGCATAG
64101 TAAAGATTA GAGATCTCT GTCTCTCT TTTTCATAAG TTAAAGAGA
64151 TGTAAATG AAGCTTTCT TTTAAATAT CTAAGCTTAC GATGATTAT
64201 TTATTTATTT GTDAGGCTT TTTTCCAA ACAACTTTT TGTATAGAAA
64251 CAGGCTCTG TATATTTC CIGGCTGTT TAAATCTTT GGGCTCAATC
64301 AATATCCCA CTTAGCTTC CCAAACTCC AGGATTACAG GCATCAGTCA
64351 CTGATCTAG CAGAGCTTG CTTTAAAAA TAAATGAC ATCTCTTA
64401 AGATATTCG TGTGAAAGT AATTTTTCT CTTATTTAT TACATCAA
64451 CATTCTTCT TAATAAAAG AGAAATAT GGGCTTTAG CAAAAAAGC
64501 ATTATTTGAG CTTGCTGATG CTGATCTGAT TCTATTTTA TATGCTAGA
64551 TGTCTTACTG GTGCTGAATC CATATAGGTC TCGAGCAAC TCAATCTTG
64601 CTTCTCAAA AAAAAAGAT CGAATCAGAG GATAAGAA GATGAAAGA
64651 CTGAGCTAG TTTCAAGCA GAGATCAATG TTTATTAAGA AGCTTTAGAA
64701 CAGGAATGAA AAAAAATAA GTACCTTGG AAGAGGCTTA ACGGGGAGAC
64751 TCGAGAGAC AAGTGCATCG TTTGACCTCT GACTTGGGT TTTATCTCT
64801 GGTGCTCTTC GGGGCTTTA CATTATTT CCACTGATTC TTGATCTGG
64851 ATGCACTGTC CATATGACA GTGCTCTCT AATGCTGTG AAGAGCTCA
64901 TGCACAGTCT GTTATCTGAA GTTATCTCA TGTCTGCTG AGGATCTCT
64951 CTTTATAG TATCTGATA ACCATATGAC AGTTAAATC CACTATTTG
65001 CTTTATAGT TGCATCTTG AGCTATTTA CCACTTTCT GAGATATTTG
65051 AAAAACTCA TCACTAGTT CAGCTTTTC TATCTATTTG GAACTCTCT
65101 TTTCTGGA CTTGCTGAA CCAATTTTA TTTTAGAGAG ACAGTTTAT
65151 AATCTCTAT CATCTGATG TTTCTGAA TTTCTCTG TGGCAGAGG
65201 GGGGAGCTC TCTGCTCTG CTTGCTCTG ACTAGCTAC TACTATAA
65251 AATGCTCTC AGATTAGAAA AAGCTCTCT ACCCTCTCT TCTCTCTCT
65301 AGTTATCTCT CAAGATGAA TATTTATGAA ATAGAGAGG TGATACATG
65351 AAAAAATAG TTTCTCTCT CTTTATAGT GCTTCAAAAC TCTCTGAT
65401 TCTTCTGCTG GTTCTCTCT AATTTATGTC GAGCTCTCT CTTTCTGCTG
65451 AATGAGAG AGTCTGCTG GTTATTTCT CTAGTTATAT GAGTCTCTG
65501 ATAGCTAAC TCTCTCAATA GTTATTTCT AGCTCTGCA TTTGAGAGT
65551 GATCTGAAA CTTTCTCTG GAGCTGAAA TTTCTCTG GATAGCTCT
65601 TCTCTGAGT GAAAACTCT TCTCTGAA TTTCTCTCT TATAGCTCT
65651 TTTTAAAGT ATATTCTAA AGGATCTCT GTATCTGAA CTTCTGAC
65701 TTAGCTTAT GATCTCTCT GCTCTCTCT CAGATCTCT GATCTCTCT
65751 ATCTGCTCT GGGCTCTCT AATCTCTCT TGTCTCTCT GCTCTCTCT
65801 TTTCTCTCT AGATCTCT TTTCTCTCT GCTCTCTCT TCTCTCTCT
65851 GGTCTCTCT GCTCTCTCT AATCTCTCT TCTCTCTCT AAGCTCTCT
65901 CTTCTCTCT CTTCTCTCT AATCTCTCT ACAGCTCTCT ACCAGCTCT
65951 CAGCTCTCT TTTCTCTCT TATCTCTCT CCTCTCTCT CAGCTCTCT
66001 AGCTCTCT CAACTCTCT AATCTCTCT ATCTCTCT CTTCTCTCT
66051 CAAAGCTCT GAATCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
66101 CATTCTCT AAAAACTCT CAACTCTCT TCTCTCTCT CTTCTCTCT
66151 ATCTCTCT ATATCTCT AAGCTCTCT TCTCTCTCT CTTCTCTCT
66201 AATCTCT CATTCTCT CTTCTCTCT TCTCTCTCT CTTCTCTCT
66251 TTTAACTCT GCTCTCTCT TCTCTCTCT CAGCTCTCT CAGCTCTCT
66301 CATTCTCT CAGCTCTCT CATTCTCT TCTCTCTCT CAGCTCTCT
66351 CATTCTCT CAGCTCTCT CATTCTCT TCTCTCTCT CAGCTCTCT
66401 ATTCTCT ATCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
66451 TTTCTCT ACTCTCT TCTCTCTCT CAGCTCTCT CAGCTCTCT
66501 CTTCTCT AAAAACTCT AATCTCTCT TCTCTCTCT CAGCTCTCT
66551 CAGCTCTCT TCTCTCTCT TCTCTCTCT CAGCTCTCT CAGCTCTCT
66601 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
66651 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
66701 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
66751 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
66801 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
66851 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
66901 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
66951 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
67001 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
67051 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
67101 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
67151 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
67201 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
67251 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
67301 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
67351 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT
67401 CAGCTCTCT CAGCTCTCT CAGCTCTCT TCTCTCTCT CAGCTCTCT

FIGURE 3, page 19 of 122

67451 TTGTTATAGC TGCAATTTTT TCAGAGTTTT TAATTGTTGA ACTACAGTBT
67501 GITTCTAGAG CTATTCTTGA TCTTTSCACA GTGTGGGGGC GAAAGTGTBT
67551 CCTTTTAGGA ATTCAACTAT TCTTTTATTT AGTTATGGGC AAGAAAGAG
67601 AGGTTAGAG ATCAATTTGT GTTCAAAAG GPGGCTTTC CTTCAGTTC
67651 ACTTAATATG TCTCTAGGT CCGAGTCAAG TGCTCTAGTA AGATCTGAA
67701 GTTAATATTT CCGTGAAGTC TTTATAATTT ATTGAGAAAT CAGAAAGAG
67751 TGTCTAGAG TTTTCAAG GCAATAAT TCTTTTCT TATTATTTG
67801 GATCTCTGA ACCCTTAAAG TAGTATCTTA AATTCAGTTA AGTCTTAAAC
67851 CCAATATTTT TGCAAGAAAT AACATTAATA GAAAGAAATG TATCTTGA
67901 GCAATATTTT TATCTTGA GTCTCTAGTT TCTTTTCTT TGAATATAGC
67951 AGCTCTCTT TATATATTTT GAAAGGCTT TCCACTTTAA AACTTATTTA
68001 ACTTAGAGT AAGCACTCTT CACTTAAGT CTGAAGATTG GTCTATCTAC
68051 TCTTTGTAAG CCGTACATGA ATGTTTAAAC ACTTCTTTA CAGTATCTG
68101 TCTATTAAAT ATTGGAATAC ATTGAGAGAA ATGTCTCAGT GAGCAATTC
68151 AGTATCTCTT GAATATCTTA GAGTGTATTT TATACAAATC TAAATGCTAT
68201 AGCTATCTAC ACAGCTAGGC TATATTGTAT GATAAGATT ATAGCTCTTA
68251 GATTAAGAAC CTCTGAGTA TGTCTCTTA CTGAATCTG AGGCAAGTCT
68301 AACCAATCTG TAATATTTT TGTATCTAAA TATATCTAAA CATAGTAAAG
68351 GTACAGTTAA AATATAATAT AAAAGATGAA AATAGTAAAC CCGTATAGG
68401 GCACTTACGA TGAATGAGGC TTGAGAACT GAGCTGTGT CTGCTGAGTC
68451 AGTCACTGAA TGATCAATGA ATCTGAAGGC CTAGGACATT ACTATGCACT
68501 ACTATAGAT TTATAAACAT TCAAGCTTA GGTATCTTA AATTATTTA
68551 GAGCTCTATT TTTATTTCTT TTTGTTTCTT AAATGAGTC TCACTTTCT
68601 CACTAGGCT AGATCTAAT GGTAAATCT TGCTCTCTG CAACTCTAC
68651 CTCTAGGCT CAGCTATCT TCTCTCTCA GCTCTCTAG TAGCTCTGAT
68701 TATAGGAGCT TCTCTCTCT TCTCTCTAAT TCTTTTAAAT ATAAAGTCTA
68751 CTCTCTCTCT TCTATTTTCT TACTGTCTAA ACTTTTAAAT GTTTTAAAT
68801 TTTGATCTTT TTGATCTAAC AGCTTAAAC ACAAACATAT TGTATCTTA
68851 TATAATTTT TTTCTCTAT ATCTCTATGC TATAAGCTTT TCTTTTCTA
68901 TTTCTAATTT TTTCTTAT TTTAACTTT TTGCTTAGAA AATGTTTAA
68951 GGTAAAGAC ACAAATCTGA GAATCTATAT CTTTAAACTT TAAATGTTA
69001 AGAAGTAAAG ATATTAAGAC ACAAACATAT GATCTAGCT AGGCTCTAC
69051 TTGCTAGGA TCTCTCTCT CATTCTCTTT CTCTCTCTCT CACAGCTCT
69101 GGTCTGAAA GGTCTCTCT GGTAAATCTA GGTCTGAGC TCTCTCTCT
69151 TATAATCTG CTTCTCTCT GATATCTCT TAAAGGACT GCTCTCTCT
69201 ATTCTCTCT TACTCTCT TATAAGTGA AAGCTCTCT TTTAAATTA
69251 TAAATATAT AGTAAATCTA TAAATCTCT AATATCTCT TTTATCTAA
69301 TATTATCTA CTCTCTCTA CTCTATCTGT TATACTTTA TATACTCTA
69351 TAACTATTA GGTCTCTTTA AGGCTCTCT AATCTCTCTA CATTCTCTA
69401 TAACTCTCT AATCTCTCT GGTCTCTCT TAACTCTCTA CATTCTCTA
69451 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
69501 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
69551 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
69601 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
69651 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
69701 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
69751 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
69801 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
69851 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
69901 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
69951 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70001 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70051 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70101 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70151 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70201 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70251 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70301 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70351 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70401 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70451 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70501 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70551 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70601 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70651 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70701 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70751 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70801 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70851 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70901 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA
70951 TAACTCTCTA TATACTCTA ATCTCTCTA GGTCTCTCTA CATTCTCTA

FIGURE 3, page 20 of 122

71001 ATTACTAGAC AATAAATTT TTTCAGCTCT ATTATAATCT TATAGAGCA
71051 CCATCATATA ACCAACTAT TTTTAAACAA AACATCATTA CATATAAT
71101 GACTATATTT TTTTAAATTT TTATAAATA AAAAATTTG TGAATTTTGG
71151 CTATATAGCC AATCTTACT TCGTTGATTT CACTCCTTTT TSCATTTCAA
71201 CCGGAGTCAC ATATTTTFA TCGTTTGTAC ACACCCCTATT GCTCTCTTCC
71251 AATTGCTTTT AATTA AAA GTTTCCTTTT TACAAAGCTT AATTTTAAAT
71301 AGAGCTATCT ATTTTAAAG CTAGAAAACD AAGGCACAA GACTTATATG
71351 CTTCTCTTAA GTTTCATATG TTCTTAAATG GAAAAGCTTG GGAATTTTCA
71401 CCGAATTTTG GCTCTGATTT CAACTCTATT GAGCACTCTT TGAATTTCTG
71451 CCGCTCTTAA CTTTATATG TCTTATGAA ATAAAGCTTG TACAAATAGT
71501 GTCTCAAGAG TCTCTTCTGA TTATTTTATC TGAAATCTCA TATATTTT
71551 TTATAGAAAT TGAATCTTT AAGAGCTTT TCTCTCTTGG TATATGACTT
71601 AGTTTCTTAA ATCTTATCT CTTCTTATAT AACTTTTCTG GAATTTATCA
71651 GCACTCTTAA AAGATTTAT GTCTTTTCTG AAGTATCTAT GGAATTTCTG
71701 ATCTCTCTG TATATTAAT CTTATTTTGA ATTGTAGCTT CATAAATCTG
71751 CAGCTGTCAA GAGAGGCACT AGCTGCTGAG TAATTAATCT ATGGGTCTGT
71801 GTTTTCTGCT GTCTTCTG TGAATCTGAA TAAGTCTCTT GAGATCTGAT
71851 GGTCTTATAA AGCTGCTCTT CTTCTGCTAT GCTTTCTTGG CTGCTCTGAT
71901 GTAAGAGCTG CTTTCTCTT TCTATCTGTA TTGTGAGGCT TCGTATGCTG
71951 TGTGCAACTG TGAATCTTCT TAAGCTCTTT TTCTTTATAA ACTATCTGCT
72001 CTTGCTGCTG CTTTATTTAG CAGCTATGCA ACAGACTTAT CTATATCTGA
72051 CCGCTCTGCT ATAGCTTATG GCTCTTCTGT TTTGAGCTTG TGAATTTCTG
72101 AGCTCTGAAA TTATCTCTGA CTAGATGAG TTTTGGAGAA GCTCTCTGA
72151 GATTAATTTAA AAGAGCTTGA CAAATCTATA GATCTCTATG TGAATTTCTG
72201 GCACTCTGCT AAGATTTAAA GCTCTCTGCT GAATCTTTCT TGAATTTCTG
72251 AGAAGCTTGA ATCTCTGAA AAGCTCTGCT GATTTTCTTT AGCTCTCTG
72301 CTTCTCTTAT TGAATTTCTT TCTCTCTGCT AGTCTCTGCT TCTCTCTGCT
72351 ACATCTCTCT AAGAGCTTGA TCGATTAAG GATCTCTCTT GCTCTCTCTT
72401 TATCTCTCTG CATTCTCTGA AGCTCTGCTG GGGATCTCTG GCTCTCTCTG
72451 GATCTCTCTG CTTCTCTGCT TTTCTCTGCT GGGCTCTCTG ATAGCTCTG
72501 TCTCTCTCTT ATCTCTCTG TCGATTTTAA ATAAATTTAA CAGAGATTTG
72551 GATCTCTCTT CTTCTCTCTT GATCTCTCTT AGTCTCTCTT TCGCTCTCTT
72601 CATGAACTCT GATCTCTCTT CAGCTCTCTT CCGCTCTCTT CAGCTCTCTT
72651 CTTCTCTCTG GCTCTCTCTG GAGCTCTCTT CATGCTCTCT CAGCTCTCTT
72701 ATAGCTCTCT GCTCTCTCTT CAGCTCTCTT AGATAAGCTT AGCTCTCTT
72751 CAGCTCTCTT AGCTCTCTT AAGCTCTCTT AAGCTCTCTT TCTCTCTCTT
72801 TGAATCTCTT TCTCTCTCTT CAGCTCTCTT CAGCTCTCTT CAGCTCTCTT
72851 ATAGCTCTCT TGAATCTCTT TCTCTCTCTT TATTAAGCTT CAGCTCTCTT
72901 TGAATCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
72951 ATAGCTCTCT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73001 ATAGCTCTCT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73051 CAGCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73101 AAGCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73151 GATCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73201 CAGCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73251 ATAGCTCTCT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73301 AGCTCTCTCT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73351 TGAATCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73401 CATTCTCTCT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73451 TGAATCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73501 AGCTCTCTCT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73551 TGAATCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73601 CAGCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73651 CCTCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73701 GATCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73751 CAGCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73801 TGAATCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73851 CTTCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73901 AATCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
73951 TCTCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
74001 GCTCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
74051 GATCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
74101 GATCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
74151 TTTCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
74201 CAGCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
74251 GATCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
74301 CAGCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
74351 GATCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
74401 GAGCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
74451 GAGCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT
74501 TTTCTCTCTT TGAATCTCTT TCTCTCTCTT TCTCTCTCTT TCTCTCTCTT

FIGURE 3, page 21 of 122

78101 ACTTAAAGCT C AGCTCCTG GGTAAAGG ATTCTCTCTG CTCAGCCTCC
78151 TGAATAGTGG GAATTACAGG TGTGACGAC CAGGCGCAGC TAATTTTTST
78201 ATTTTATA GAGAGGGG TTAATATAT TACCGAGGT GGTCTCAAC
78251 TCGTAATTT GATTATGCA CAGCTGCG CTTCCMAAG TGTTGGATT
78301 ACAGGATTA GATAGGCTG CTGCTCAAA ATATCTCTT TTATCTAG
78351 GGTAAATAT TACCTCTCT TATCTATCA TTTGCAAGC AGITTTAT
78401 CTITTTTAT GTTCTGCTT AATTATTTA TTTCTTAT TTTATGCTCA
78451 GTAATATTT TCTCTCTCT TATTATCTG CTGCAATTC CATTATGCT
78501 CAGGATTTT TTAGAGAT TGTGATATCT CAGTAATAG CATAGAAAC
78551 TGTCTTATCT CTCTCAAA TAATATTCA CTGAAAGAG GCAGATGATA
78601 AAGAAATAAA TAAATATTI CAGAAATGA TAAATATTT TAAGAAATG
78651 AAGTCAATA AGGAAGTGA AATTTTTAT GAGGCTGCTG TCCAGGCTG
78701 GGAAGTATTT TTAGATAT TAAATTTT GCAATTTGG GATAGATAAT
78751 TCTTTCTCT GTTCTAGCT TCTCTCTAA ATATCTTAA ATCTAAGAC
78801 AGTCTCTCT GAAAGGATAT CTCTAGAGG ATCTCTGAC TCTAGCCTCT
78851 AGTCTCTCT ATATCTCTCT TCAATCTGA TAATCTTAA AATATCTCT
78901 AGATCTCTCT AATCTCTCT CAGAGAGAA AATCTCTCT AATGAGAG
78951 CAGTCTCTCT AATCTCTCT AAGGCTCTCT CAGGCTCTCT AATGAGAG
79001 AGATCTCTCT TTATCTCTCT CAGTCTCTCT AAGGCTCTCT AATGAGAG
79051 TAAATAAGTG CAGAGAGAG GTCTCTCTCT AATGAGAG TTTGAGAG
79101 GAAAGAGAG TTATAGCTCT CAGTCTCTCT AATGAGAG AGAATAGAG
79151 GAGATAAAAG TAGAGAGCTA GCTCTCTCT AATGAGAG GATCTAGAG
79201 GAGAGAGAG AAGAGAGAG AATCTCTCT AATGAGAG AATCTAGAG
79251 CAGTCTCTCT GAGAGAGAG GTCTCTCTCT AATGAGAG AATCTAGAG
79301 GATCTCTCTCT TTCTCTCTCT TTTATTTTAT TTTGAGAG TTTGAGAG
79351 TCTCTCTCT TTCTCTCTCT GATCTCTCT CAGAGAGAG TAGAGAGAG
79401 ACTAAAGAG AATCTCTCT GATCTCTCT TATAGAGAG TCTATTAAG
79451 AGGCTCTCT AAGGAGAGCT CATTATTTAA CAGTCTCTCT GATCTCTCT
79501 GTTCTCTCT CAGAGAGAG GTCTCTCTCT AATGAGAG AATCTAGAG
79551 TATAGATTT AATCTCTCT AAGAGAGAG AATGAGAG AATCTAGAG
79601 CAGGAGAGAG AATCTCTCT CAGAGAGAG CAGGAGAG CAGGAGAG
79651 AATCTCTCT AATCTCTCT AATCTCTCT CAGGAGAG CAGGAGAG
79701 AATCTCTCT GTTCTCTCT CAGTCTCTCT TTAGAGAG TTTGAGAG
79751 TGAGAGAGCT CAGTCTCTCT TATCTCTCT TATCTCTCT CAGTCTCTCT
79801 ACTAAAGAG TTTCTCTCT TCTCTCTCT CAGTCTCTCT AATCTAGAG
79851 TGTCTCTCT ATTAAGCTCT CATTATTAAG TCTCTCTCT TCTCTCTCT
79901 CTTCTCTCT CAGGAGAGCT TCTCTCTCT AATCTCTCT CAGTCTCTCT
79951 AATCTCTCT TATCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80001 TTTCTCTCT TATCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80051 TGTCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80101 ACTCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80151 CAGTCTCTCT AATCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80201 AATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80251 TGTCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80301 TGTCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80351 ACTCTCTCT TATCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80401 TATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80451 CAGTCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80501 CAGTCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80551 TGTCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80601 TGTCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80651 AATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80701 TGTCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80751 AATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80801 AATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80851 AATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80901 TATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
80951 AATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
81001 GATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
81051 GATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
81101 TATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
81151 AATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
81201 GATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
81251 AATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
81301 TATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
81351 TATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
81401 AATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
81451 GATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
81501 CAGTCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
81551 CAGTCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT
81601 AATCTCTCT CAGTCTCTCT CAGTCTCTCT TATCTCTCT CAGTCTCTCT

FIGURE 3, page 23 of 122

81651 CATGTATGTG CTAAAGAAAG TGTCTAAAT CTGGATATA GAGGTATCAA
81701 ACAGTGTGTC TCAGAAAGAA ATTTCAAAT GGTTCATC ATTTCATCT
81751 ACAAAAT ATT GCATTTTATA GAAAAAATA TGTGTGTAA GATATTTTC
81801 TTAAGATTA GGTTTTGAG GTGGGATTA TTTTCTCT GAGTTTTCAG
81851 AATAGATAT TTTTCTCT ATATTAAAG AGAGAAATGA AATATTTAG
81901 TATTCTAGA AGTTATGTC ATATGTATTA GCAGATAAA TTTGATATC
81951 CTCTGAAAG TTAATTTAT CTGTAAAGG GAAATATAA TGGTAATAC
82001 CCAAGTTTG GTTTTCTAT CTGTAAAGG GAAATATAA TGGTAATAC
82051 AAGGCAAAA TATATATTA ATGAGAGCAT AATTTTAAA TATTTATCT
82101 AATGCTTTC ACATATGAG TATTATTA CAATTAATA ATATATTA
82151 TATTATTA TATATATTA TATATTA TATATTA TATATTA
82201 GTTCTATTA GATATTA TATATTA TATATTA TATATTA
82251 TTTTCTGAG TATATTA TATATTA TATATTA TATATTA
82301 GGAAGAAAT GCAGATGAG GAGGAGAG AGTCTGAG CCAATGCT
82351 TATCTGAGG ATTCTGAG GTGAGTAT CTATTTTTC CACAGGTTA
82401 GTCTGTCTT TGGGGGCTG TGTGTGAAA TGGAGTAT TATCTGAT
82451 CTTTGGGCT TATCTATTA AGATGCTAG CAGCAATTA ACCCTCTCA
82501 AGTTCTGAT ACAAAGATA TATCTGAT TTTGCTGAG GGGGGCTCT
82551 GGTCTGAT GAGATGCT AATTAATA TATCTGAT TATCTGAT
82601 ACATGCTAG TCTGAGGATA GCTCTGAG GGTCTGAG CAGGAGTGG
82651 GATTTTTTT TCTGAGGATA GCTCTGAG GGTCTGAG CAGGAGTGG
82701 TCTGAGGATA TCTGAGGATA GCTCTGAG GGTCTGAG CAGGAGTGG
82751 CACATAGAT AATATTTTC ACAAAGATA TTTTCTGAG CAGGAGTGG
82801 AATTTTAT TATTTTAT TCTGAGGATA TTTTCTGAG CAGGAGTGG
82851 TTTTCTGAG TATTTTAT TCTGAGGATA TTTTCTGAG CAGGAGTGG
82901 TGTGTGCTA GATTTGCTG ATGAGTAT GTTTTCTG CTTTCTGAT
82951 AGAATATAT GAGGAGTAA GTTCTGAT TTTTCTGAG CAGGAGTGG
83001 ATAAATAT TATTTTAT AATATGAG TTTTCTGAG CAGGAGTGG
83051 AGAAGGATA TTTTCTGAG AATATGAG TTTTCTGAG CAGGAGTGG
83101 ACAAAGGATA AATATGAG TATGAGTAA ACATTTAT CCAAGTAT
83151 ATCTGCTTC ATGCTGCTG TTTGCTGAG CTTTCTGAG CAGGAGTGG
83201 TATTTTCTG ATTTTCTG TTTTCTGAG CTTTCTGAG CAGGAGTGG
83251 ACTTATGAG TTTTCTGAG ATTTTCTG TTTTCTGAG CAGGAGTGG
83301 GCTTTTCTG CTTTCTGAG GTGTTTCTG TTTTCTGAG CAGGAGTGG
83351 CACTTCTG TATTTTAT GCTCTGAG TTTTCTGAG CAGGAGTGG
83401 GAGATGCTG GTTATATTA GATTTTCTG ATCTGAGT GCTCTGAG
83451 ATCTTTCTG AATTTTCTG ATTTTCTG CACTTCTG TTTTCTGAG
83501 TTTTCTGAT TTTTCTG ATTTTCTG ATTTTCTG TTTTCTGAG
83551 TGAATATTA AAAAAATG AATATGAG GGTCTGAG CAGGAGTGG
83601 GATATATTA GATATATTA GATATATTA GATATATTA GATATATTA
83651 AGTATATTA GATATATTA GATATATTA GATATATTA GATATATTA
83701 GGTCTGAG TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
83751 AGTTATTA TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
83801 TGAATATTA TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
83851 ATTTTCTG TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
83901 AATTTCTG TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
83951 GTGTTGAG ATTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
84001 TATCTGAG ATTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
84051 GATATATTA GATATATTA GATATATTA GATATATTA GATATATTA
84101 GGTCTGAG TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
84151 AATTTCTG TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
84201 GATATATTA GATATATTA GATATATTA GATATATTA GATATATTA
84251 GTTCTGAG TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
84301 TTTTCTG TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
84351 GATATATTA GATATATTA GATATATTA GATATATTA GATATATTA
84401 GTTCTGAG TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
84451 GATATATTA GATATATTA GATATATTA GATATATTA GATATATTA
84501 AGAAGGAG GTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
84551 GTTCTGAG TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
84601 GATATATTA GATATATTA GATATATTA GATATATTA GATATATTA
84651 TCAATTTCT GATTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
84701 AATTTCTG ATTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
84751 TTTTCTG TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
84801 GATATATTA GATATATTA GATATATTA GATATATTA GATATATTA
84851 GTTCTGAG TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
84901 AGAATATTA GATATATTA GATATATTA GATATATTA GATATATTA
84951 TTTTCTG TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
85001 GTTCTGAG TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
85051 TTTTCTG TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG
85101 ATGATATTA GATATATTA GATATATTA GATATATTA GATATATTA
85151 GTTCTGAG TTTTCTG ATTTTCTG TTTTCTGAG CAGGAGTGG

FIGURE 3, page 24 of 122

85201 CTGCGACGCT ATACTGAAG CATCCAAAGT ATAACTGCG TGATTAGGGG
85251 AAGAAAGAGT GAGCTAGCTG GCAAGGGGCG TAAAAATCAA GTCCCTTCT
85301 TCTAGAGCTA GAGTAACTCA CAATTAACAA GCTGGCTTAA AATAAAAGCA
85351 TTCAAAGAA AGTATGCTGG AGAGAGGCAA CAGAGTGATA AGTAAATGCG
85401 GTTGGAAAT GGAGAGCTTC AAATTCGAAT TAGGAGCTCT TATTTGTA
85451 GTTAAATAT TAGAGCTAG TTATTAATC TCTAAGAGC TCAATCAAT
85501 CAAAGAGAG GGTCTTATTA TATTAATAC TCTAAGAGC TATTAATTA
85551 TGGAGAGAG GAGCTGCTTA AGTGTGACA TATAATTT ATTTATGCT
85601 TCTTTTCTT GTTATTAATA ATAGTAACAA CAATAAATAT CTTTCTCTT
85651 ATTTCTTCA AGTCTTCTT GGTGGTAAAG TGAATTAGAG TGGCTGAGA
85701 TATAATGAG GGTCTTCTT TTTAATAATC ATTATCTTT TCAAGAGAA
85751 TAGAAGAGAT ATAGCTCTT TTTAAGCTT AATGAGAGAA AGTCTTCTA
85801 GCTTCTCTT TAAAGAGAG AGAGAGAGAG GAGGAGAGAG AAGAGATG
85851 TCTATTTTA CTTAAGAGTA ATAGAGAGAG TAATTTTAAG TAAAGATCT
85901 ATGAGCTGAT TTCTGATTA TTTAAGTAT ATTATCTCT TGAATAGAA
85951 ATCTGAGAG TGTCTTATTC ATTATCTCT GGTAGATGA AAGGAGAGG
86001 AGCTGAGTA AATAAATTT TTCTCTGAG CAAAGCAGAG GAGAGATAT
86051 ATAGAGAGAA TTATTAATAT AAGAGTGGG GTGAGAGAG AAGCTGGGT
86101 TCTAGCTCT TCGATAGCT GAGCTTGAAC AAATCTCTT CCTATCTTG
86151 GCTTCTCTT CCTATCTTG AAGAGCTAG GATATCTCT GATATCTCT
86201 AAGGCTCTT TCGCTCTTG CAAAGCTAG GATATCTCT TGAATATAT
86251 TGAAGAGAG ATTAAGAGAG AGAGAGAGAG AAGAGAGAG AATGCTCTT
86301 TCTGCTCTT AATGCTCTT CTGATAAAG AGAGAGAG AATGCTCTT
86351 CAAATTAATG AATTAATG GATAATCTT GTTATCTCT AAGCTCTCT
86401 CTAAGCTCT TAAATGAGAG GAGAGCTCT TTTATCTCT CAACTCTCT
86451 TCTGCTCTT TCTGAGAG CTGAGCTCT GAGAGAGAG TCACTCTCT
86501 TGAAGAGAG AAGAGAGAG GAGAGAGAG GAGAGAGAG GGTCTTAA
86551 AAAAGAGAG CAAATATCTT GATGAGAG AAGAGCTCT CTAATGAG
86601 CTAATGAG AAGCTCTCT AAGCTCTCT GGTCTCTCT CTAATGAG
86651 GGTCTCTCT TGAAGAGAG TTAGGAGAG TTATCTCT AATGAGAG
86701 CTTATCTCT GTTCTCTCT GGTCTCTCT GGTCTCTCT AAGCTCTCT
86751 ATGAGAGAG GGTCTCTCT GGTCTCTCT GGTCTCTCT AAGCTCTCT
86801 AAGCTCTCT AAGCTCTCT GGTCTCTCT AAGCTCTCT AAGCTCTCT
86851 AAGCTCTCT TGTCTCTCT AAGCTCTCT GGTCTCTCT AAGCTCTCT
86901 AAGCTCTCT GGTCTCTCT AAGCTCTCT GGTCTCTCT AAGCTCTCT
86951 CTTCTCTCT TGTCTCTCT AAGCTCTCT GGTCTCTCT AAGCTCTCT
87001 TGTCTCTCT AAGCTCTCT GGTCTCTCT AAGCTCTCT AAGCTCTCT
87051 CTTCTCTCT TGTCTCTCT AAGCTCTCT GGTCTCTCT AAGCTCTCT
87101 TGTCTCTCT AAGCTCTCT GGTCTCTCT AAGCTCTCT AAGCTCTCT
87151 ATGCTCTCT TGTCTCTCT AAGCTCTCT GGTCTCTCT AAGCTCTCT
87201 ATGCTCTCT TGTCTCTCT AAGCTCTCT GGTCTCTCT AAGCTCTCT
87251 CATCTCTCT AATCTCTCT ATCTCTCT CAGCTCTCT TTAATCTCT
87301 AATCTCTCT AATCTCTCT TTAAGAGAG GGTCTCTCT CTAATCTCT
87351 AATCTCTCT TTAAGAGAG CTTCTCTCT CTAATCTCT CTAATCTCT
87401 TTAAGAGAG TTAAGAGAG AATCTCTCT TGTCTCTCT AATCTCTCT
87451 TCTCTCTCT AATCTCTCT ATCTCTCT CTAATCTCT AATCTCTCT
87501 AATCTCTCT GAAAGAGAG AAGAGAGAG TAAATCTCT TAAATCTCT
87551 TGAAGAGAG TTAAGAGAG TTAAGAGAG GAAAGAGAG GAAAGAGAG
87601 AAGAGAGAG AAGAGAGAG GAAAGAGAG GAAAGAGAG TTAAGAGAG
87651 GGTCTCTCT GGTCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT
87701 AAGCTCTCT AAGCTCTCT AATCTCTCT AATCTCTCT AATCTCTCT
87751 CTTCTCTCT ATCTCTCT CTAATCTCT CTAATCTCT AATCTCTCT
87801 TCTCTCTCT CTTCTCTCT AATCTCTCT TAAATCTCT TAAATCTCT
87851 CTGAGAGAG TCTCTCTCT GGTCTCTCT TAAATCTCT TAAATCTCT
87901 ATCTCTCT CTTCTCTCT TCTCTCTCT TAAATCTCT TAAATCTCT
87951 ATCTCTCT TAAATCTCT AATCTCTCT CTAATCTCT CTAATCTCT
88001 TAAATCTCT TTAATCTCT ATCTCTCT CTTCTCTCT CTTCTCTCT
88051 TCTCTCTCT TAAATCTCT CTAATCTCT TCTCTCTCT TCTCTCTCT
88101 CTAATCTCT AATCTCTCT GGTCTCTCT GGTCTCTCT TAAATCTCT
88151 TAAATCTCT GGTCTCTCT AATCTCTCT GGTCTCTCT AATCTCTCT
88201 AATCTCTCT AATCTCTCT TAAATCTCT GGTCTCTCT TAAATCTCT
88251 TAAATCTCT GGTCTCTCT AATCTCTCT GGTCTCTCT AATCTCTCT
88301 GGTCTCTCT TAAATCTCT AATCTCTCT GGTCTCTCT TAAATCTCT
88351 TAAATCTCT GGTCTCTCT AATCTCTCT GGTCTCTCT AATCTCTCT
88401 AATCTCTCT TAAATCTCT AATCTCTCT GGTCTCTCT TAAATCTCT
88451 GGTCTCTCT TAAATCTCT AATCTCTCT GGTCTCTCT AATCTCTCT
88501 CTTCTCTCT TAAATCTCT AATCTCTCT GGTCTCTCT TAAATCTCT
88551 TAAATCTCT GGTCTCTCT AATCTCTCT GGTCTCTCT AATCTCTCT
88601 TAAATCTCT GGTCTCTCT AATCTCTCT GGTCTCTCT AATCTCTCT
88651 TAAATCTCT GGTCTCTCT AATCTCTCT GGTCTCTCT AATCTCTCT
88701 TAAATCTCT GGTCTCTCT AATCTCTCT GGTCTCTCT AATCTCTCT

FIGURE 3, page 25 of 122

88751 CTGCACAT AAATTAUNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN
 88801 NNNNNNNNNN NNNNNNNNNN TCTAGTTTCA GCAGAGAC TC CAAGTCACAG
 88851 AAAATACCA TATTTTAA TCAATTTATIT CTGGATTCCT CTGAGCTTG
 88901 TCAATTTAG ATAAGACA AGATGGTATG TTCTAATTTT ATGATATAGA
 88951 AAAATTTT AATTTTATG AAGCAAGG TCCTATTTTA TGCTTTTTS
 89001 TATAAGATAT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 89051 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 89101 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 89151 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 89201 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 89251 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 89301 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 89351 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 89401 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 89451 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 89501 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 89551 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 89601 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 89651 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 89701 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 89751 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 89801 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 89851 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 89901 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 89951 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 90001 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 90051 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 90101 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 90151 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 90201 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 90251 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 90301 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 90351 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 90401 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 90451 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 90501 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 90551 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 90601 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 90651 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 90701 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 90751 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 90801 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 90851 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 90901 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 90951 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 91001 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 91051 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 91101 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 91151 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 91201 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 91251 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 91301 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 91351 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 91401 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 91451 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 91501 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 91551 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 91601 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 91651 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 91701 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 91751 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 91801 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 91851 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 91901 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 91951 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 92001 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 92051 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 92101 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 92151 TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT
 92201 CAAAAGAGG AATAGAAA TAGAACTAG AATAGAAA TTTTCTTT
 92251 AATTTTAA TTTTCTTT TTTTCTTT TTTTCTTT TTTTCTTT

FIGURE 3, page 26 of 122

99401 CTGCTTAAT SGATAATGCG ACTGTGAGGA AAATTACCAA GGGGAGAAG
 99451 ACATCTGCTT GGGGGAGCTT CTAAATATTT ATTGACATA ATCAGGAACA
 99501 GGAATGAAAT AGTCAATTT ATAATAAAAT CTGATTTCT AAAAATGAG
 99551 AAAATATTAAT GTATTAAT GGAAGAAAT TATTCTGCT CAATTGAAAA
 99601 GAGATGATAA AATATTCTTG AATTAATAA TTTATTTCT TGCCAGGATA
 99651 GTGAAAAATA GTTGTCTTG GATTAATAA GAGAAACAA GTAGAAATG
 99701 ATGTAATATG AGGCTTAATA AATATGAGG TTTATCTCT TGTGTCTAGA
 99751 TATTAATGAG AATCAATTTT TGATATCT TATATATAT TAGTCTCCCG
 99801 TTTCTCTTA TTTTGTGAG GTTTCTGAA ATGCTTTCT CTAAAGCACT
 99851 GGTCTCTCTT GTATGTCTAT GGAATATCT GTTCTAATG GTATGCTCTC
 99901 ATTATCTCT TATCTGAAAA AATGTAATTT GTTTCTGAG TGCTCTCAAT
 99951 GTAAATCTA AGTCCACTGG CATTAATAAT TCTCTAAT TAGCATTAAC
 100001 TAAATTTCTA GGTCTCACTT CTAATTTCT GGAATCTATA TAACATGATG
 100051 TTAATATATA GTGACAGAAAG GAGTTCTGGA GTGAATAGC TGATGTAAT
 100101 CTGCTTTCTT CCATTTCTCT CTTCTCTAG CTAGGATAA TTGCTTAATC
 100151 CTCTTGAGCG TATGCTTTTA TACTTTTAAA TTGAATTTAT AGTGTAAAGT
 100201 TTAATCAGA TAATTAAATA AAGCTTTAG CATAATCAT GATGTACTGA
 100251 AATTAATGAT TAAATAATAG TATATTAGAT TATAAGCTT ACTCAATATC
 100301 TTTATCTCT ATCTAGTATT TACTATTAAG TTAATGATA TTCTATTGC
 100351 TTGAAATATA TCTTTCTGCA TTTATGAAA ATGTATAAD CTITGCTCAC
 100401 GATTAATAA TCTTCAGCTC CTTCTTTCTA GGTATATAT ATTGCACTTG
 100451 GTTCTATAA CTGATATCAA TGATTAAGG ATCTTTTAA TAAACATTC
 100501 TTTGATGAT GATTAATAA ATGATAAAG AATGAGGTA AAAGAAAGT
 100551 AATTTCTATA TTTCTTAAG TGAATAAAG AAGAAAGAG AATCAAAATA
 100601 TTTTGAAT AAAATTTCTG TCTCTCTTA GTTTCTAAT TGTTTATAAG
 100651 GTGAGGAGTA TCTTCTTAC CATTTATTA GTTCTAAG TATTTTAA
 100701 TTTATTAAT AAGTTTATG AATCTTTTA TATTTCTG AGGAAGGATG
 100751 GTATTAAT TTAATAATAT ATATATGAT CTGCTAGGAA GAAAAAAGA
 100801 AGCAATATCT ATTCTGTGAG GTGATTAAT TTTGATTAAC TCTAATGAA
 100851 GTGCTGAGAG GAGTTGCTTT ATTTCTTAA ATGTAATTA ATTTATCAT
 100901 TTAAGGCTC CTGATGGATA CTCTTATTT TAATTAASTA CATTTTGGC
 100951 AAATTTTAA TTTAAAAACT CAATAAATTT GTTCTCAAC TTGCTTTGTA
 101001 GATTTGCTA TATTAGATAT AAATTTATTA TAAAGGCTA TGTAGAAAC
 101051 TTTCTACTT GAAATCGGCG AATTAATAA TTTCTTTAG GATTCAGTG
 101101 CTGATATG TGCTGCTTG TTTGCTCTG TGATCTGCTG GTTTTATTT
 101151 GATTTTATA GAAATAATAA AATATCTCT GAAATATTA TTTCATTACT
 101201 GATTTTCTG AGAGCTTCAG AGTCTCTTA TCTATCTCA TTTACTCTCA
 101251 GTTCTTAT ATAAATCTGCT AGTCTCTTA TGAATAAATA TCCAGAACAG
 101301 AAAAAAATA ATTGATACA GAAATATCT AATTAATAA AATGCTGCTG
 101351 TATTTTCTG TGAATAATA ATTTCTCTA TGAATAAATA GGGAGATGCT
 101401 TTTTGAATAA ACTGAATATT TATGCTCTA AATAGTCTG AGGTGCTGCTG
 101451 AGTTTACATA AATTAATGTA TTTCTCTCT CTATCTGCT GTTCAAAATG
 101501 GTGCTTTCTA GTAAACAAAT AATTTCTTT CTAAATTAAT ATTAATATG
 101551 GTGATTAATA ATCTACTGAA ATTATAATTT GTTCTCTCT CATTTGTAAA
 101601 TTTCTTTCTG TTTTATAGTT TTAAGATAG TATAAATAA GGATTGATCT
 101651 GTTCTCTCAT GTTCTCTCAT TTTCTAAT CATTTATAGTA AATATAATTT
 101701 GTTCTCTCTG TGTCTCTGAG AATTAATTT GTTCTAAAAA GGTCTCTATA
 101751 AATATCTAG TGTGAAAAAA TTTCTATTA AGATGATAGT AAAAGCTCTC
 101801 AAGGAATCTG TGTCTATGCT CTAATTTCTA TTAATCTAG TTTCAAAAC
 101851 AATAAGGAG GATCAGAAA TGTATTAAT GGTATATAGT GAAACAGCAG
 101901 GTTCTCTAGT AAGAGTAAAA TATTAATTT TTAAGAGCT TTTAGGCTTG
 101951 TATAAATGAG AAAATCTAG AATCAGAGT TGTCTAGCT CTGTGAGTAT
 102001 GTTCTATGAA GTTCTAAAAAT GTTCTAAAAA AATTAATCTAT TGAATCTGT
 102051 GTTCTCTCTG GTTCTCTCTA ATATATCTAT GTTCTCTCTA ATGCTTTGGA
 102101 GTTCTCTCTG GTTCTCTCTA ATATATCTAT GTTCTCTCTA ATGCTTTGGA
 102151 TTAATATCTA AATTAATTTA AATTAATTTA TTTCTCTCT ATATTTCTCT
 102201 AAAAAAATA TTTCTAAAAA AGGCTATCT TATTTCTCT GTTCTAAAACT
 102251 TTTCTCTATA TTAATTTCTA AATTAATTTA TTTCTCTCT GTTCTAAAACT
 102301 TTTCTCTATA TTTCTCTCTA AATTAATTTA TTTCTCTCT GTTCTAAAACT
 102351 TTTCTCTATA TTTCTCTCTA AATTAATTTA TTTCTCTCT GTTCTAAAACT
 102401 TTTCTCTATA TTTCTCTCTA AATTAATTTA TTTCTCTCT GTTCTAAAACT
 102451 TTTCTCTATA TTTCTCTCTA AATTAATTTA TTTCTCTCT GTTCTAAAACT
 102501 TTTCTCTATA TTTCTCTCTA AATTAATTTA TTTCTCTCT GTTCTAAAACT
 102551 TTTCTCTATA TTTCTCTCTA AATTAATTTA TTTCTCTCT GTTCTAAAACT
 102601 TTTCTCTATA TTTCTCTCTA AATTAATTTA TTTCTCTCT GTTCTAAAACT
 102651 TTTCTCTATA TTTCTCTCTA AATTAATTTA TTTCTCTCT GTTCTAAAACT
 102701 TTTCTCTATA TTTCTCTCTA AATTAATTTA TTTCTCTCT GTTCTAAAACT
 102751 TTTCTCTATA TTTCTCTCTA AATTAATTTA TTTCTCTCT GTTCTAAAACT
 102801 TTTCTCTATA TTTCTCTCTA AATTAATTTA TTTCTCTCT GTTCTAAAACT
 102851 TTTCTCTATA TTTCTCTCTA AATTAATTTA TTTCTCTCT GTTCTAAAACT
 102901 TTTCTCTATA TTTCTCTCTA AATTAATTTA TTTCTCTCT GTTCTAAAACT

FIGURE 3, page 29 of 122

102951 CCAACTAGBT CAGATDCTCA TTCACAATA TTCATAATC ATAAATTC
103001 CCTGATAGC ACTAGBTGAC ATCTAAGCA TAATTATTTA TCTGTATAT
103051 GCGTTTAC TCAACTGCA GCTTAGAG GAGATAGTA AAATTTGTTT
103101 TGTTACTGCT GGAATTCCTA GAACTAATA TAGATATAG CACCAAGAG
103151 CACTCATAG AAGTTGGATG AACTAAGAA GAAATGTTG GTCTAGGAG
103201 GGGTTGGAG CATAAGAAATA ATA TCTAT TTAAGAACTA AAGAGGAT
103251 TTAAGAACTA CAGAAATGAA TAAAGTAA TTCTCTAGC AAGAAATGCA
103301 CAGAAATGAG AAGTAGGCT AGATTATTA CTATAAGCTA AAGAAATGAG
103351 ATAAATTTT GTGATGCAAA CATTAAGCA AAGTCTAAG CCAAGAACTA
103401 TCTAAGAACTA TAGAAAGTAT ATTAAGAAAT CATGCTTAA CTGTACCTG
103451 AAGAAAGAA AGTGGCTAC CCGTTTAACT GTGTGAGAG GAAAGCAAA
103501 TGATGATTT TAAAGGAA AAGATTTG GCGTTTATG TTTTGCCCA
103551 CCGTATTTT CCGTTGCA AATAAGCA GTGATATAT AAAAGCACA
103601 AGATGCAAG GGGGTTGGAG AGAGTATGG CAGTAAAT AAGGCTGAT
103651 GAAAGATGAT TTAGAAGTT GGTCTTTT ATAGCAAGAG GCTGTATTC
103701 TTGAATGCT CAAGGATG GCTCTTTT TTCAAGACTC ACAGAAAGT
103751 GTAAAGTCA AAGATGCT CAGAAAGT TAGATGCTC TAGATTCCAT
103801 TGAATTTG CCAAGGGGCT TGAAGGATA GATGAATTCT ACTACTCCA
103851 GCTTCTCTA GAGTTAGCAG AGTTCAGGT TGGGATCAG GAGACCCAG
103901 TTCTAGTCT GTCTGCTGG TGTCTTTT GTGCTTTTGA GCATATCACT
103951 TTATCTCTT TATCTCACT TTCTCTCT GTAAAGGAA GATTTTCTC
104001 ATCTATCT GGTAGGACAA GAGATTTT AATTATTT TTCTCTCTA
104051 ATAATGCTG CATAACTTAC AAAATCAAT GTTACTTCA GTCATAGAG
104101 AAAATTCAC ATTCTCTCT CCGTCTCT TCTATTTG ATTCAGCTC
104151 TCATAGGCA TCACTTTAGG CTCTCTTAC TCTTTTCT CATATTTTAC
104201 CTTTCTAT CTCTATTT CCGTTTCT TTGCTCTCT ATAACAATA
104251 CTATAGCTG GGTGGCTTAA ACAAAGATG TTTATTTCT AGTTCTGAG
104301 GCTGGCAAT ACAAGATCAA TGTGAGGCA ATTGGGCT TGGCAAGAG
104351 CCGCTTCTA GTTACAGAT GGTCACTTC TTCTGCACT TTGCTGAG
104401 AGAGAGAGG GAGAGAGAG GAAATGAG CTCTTTCTCT TCTTAGAGT
104451 TCATCATGCT GCTGCACTCT CGTGACTCT TCTAAATCT ATTAAGTCT
104501 AGAGAGAGG GCTGCACTCT GGTGACTCT CAGTTTGGG GGGGAGGCT
104551 GGTGAGTCT TCAAGGCTAG GATTTGAG CCAAGCTG CAGATGGA
104601 AAAGCTCTCT TTTACTAAA ATACAAAAA TTAGCTGCT TTGGAAGAG
104651 ATAGCTCTCT TCGAGGCTAG TCGGAGGCT GAGGCTGAG AATCACTTA
104701 GGTGAGAGG TGGAGGATG AATAAGCTA CATGAGGCA CTGCTCTCT
104751 AGCTGCTCT CAGAGTAAA TTTACTCTA AAAAAATAA AAATAATAA
104801 AATCTGAT AAGGCTCTA GAGTCTCT TCTAATCTA TCCACTAGA
104851 GATTAGGCT TCAATTTAT AATTCTCTA GGGGCTCTA AATGAGCTC
104901 CAGAGGATG CCGTCTCTA ATTTCTCTA TTTAGATAT AGTTTCTG
104951 TGTACTCTG CAGATGAG AATTTAAAT AATACTCTA ATTTAGCTA
105001 TGTACTCTA AATACTCTA TCTAAGCA GCTAAGTCT AACTCTTAA
105051 AATTCTCTG TTTCTCTCT AATCTCTCT GCTCTCTCT TTTCTCTCT
105101 TTTCTCTCT TTTCTCTCT CATACTCTA CATTCTCTA GATCTCTCT
105151 TTTCTCTCT AATCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105201 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105251 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105301 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105351 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105401 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105451 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105501 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105551 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105601 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105651 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105701 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105751 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105801 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105851 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105901 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
105951 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
106001 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
106051 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
106101 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
106151 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
106201 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
106251 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
106301 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
106351 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
106401 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT
106451 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT GAGCTCTCT

FIGURE 3, page 30 of 122

106501 AATTCCCTTTT CACAGATGGT TATTTCAGCT TTCTTCAGCT TGCTAAGTCA
106551 GTTACCTTCA TCCACTCTCC ATCTTTAGA TGTGTACTTT CCTTGTCTTT
106601 TCTCTCTCTT TTTTAASTTT CT TTTTATC TGTATATTCA CACTTATCTT
106651 ATTATTTTGG TSBATTITAT GTAGTCTTGG GGSAGATASC AAAATAAGC
106701 ATGTATGTTT CACATCCACAT SCATCAGACA CAGTGTGTGT AAAGTSTAAT
106751 TTTTAAATAA AATTTTATT STA TTTTAG ATTACAGAA ASTT TAAAG
106801 GTTATCTCAG AGAGTTCACA AATACCTGT GTCCTATTTT TCTCTCTAT
106851 GATTAAATC TTACATTAGT GTCTCTCAT TGTACAGTT AATGAATAA
106901 TACTAAATCT AATATATTAT TATTACATAA CACTAAATAC TGTCTATCT
106951 AGCTCTTTGG AAGAATCTA CTATCTCTAG AGATAGAGT GTTATGTAA ATTATTTAA
107001 AGTTACCTCT TACTCTCTT TCTCTCTCT CATTTATTTT TTACATATCT
107051 ATTATCTGA CTCTGAAAT TCTCTCTCT CATTTATTTT TTACATATCT
107101 AGTATTTTAT TTATATCTAT ATCTATCTAA GATATCTAT TTTATCTTT
107151 GGTATTAAT TCAATACAT TTCTCTAT TTATGTCTA CATTCTGAAA
107201 TGCTTTTAA TTCTAAAGCT TTATTTAAA AGCAAGATAT GAGTTAAAT
107251 ATATAATATA ATATATATAT AATTAATATA TATAATATA TGTAATAGG
107301 GTTATATCT TACAAATAGT TCTTATCTCT TTTACTAAT AACAAAGTCT
107351 TACACATAGA ATCTGGGGA GGTACATAGG ATTGGAAAC TAAATCTCT
107401 TTTGCTAATC TCTGCTTT TAAATATATA TTTAGTCTT TCTAAATCT
107451 CAGTCTCATG TCTCTCTGAG GGTCTATAG ATGCATAAAA GCTCTCTCAA
107501 GCACTCTAAC CTATTTAGGG AATATACAT ATATAGACAA TAAAAAATA
107551 AATCTCTCA CAGTCTCTAT AATCTCTCA TTATGTCTT TTCTATCTT
107601 AAGCTCTACA GATTCTCTG CTCTCTCTG CAATTTGCTT GCTCTCTCA
107651 TGTCTCTCAT TCTCTCTCT GGTCTCTCT ATTTAGACAG AGTGAATTA
107701 GAGCTCTCT TAACTCTCA GGTCTCTCA ATCTCTCTT TATCTCTCT
107751 GCACTCTCTA AAAATCTCTA AATCTCTCA ATCTCTCTT TCACTCTCT
107801 TTTTAAATG TATCTCTCT GGTCTCTCT ATCTCTCTT TCACTCTCT
107851 TTTCTCTCT GGTCTCTCT ATCTCTCTT ATCTCTCTT TCACTCTCT
107901 GTTTATCTAT TGTCTCTCT AGTCTCTCT AATCTCTCT TCACTCTCT
107951 ACTCTCTCT ACAGCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108001 ATAGCTCTCT ATTTCTCTT TGTCTCTCT GGTCTCTCT TCACTCTCT
108051 GGTCTCTCT GGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108101 ACTCTCTCT CAAGCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108151 TGTCTCTCT GGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108201 CAGTCTCTCT GTTTCTCTT TGTCTCTCT GGTCTCTCT TCACTCTCT
108251 TTTTAAATG TATCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108301 TCTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108351 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108401 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108451 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108501 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108551 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108601 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108651 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108701 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108751 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108801 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108851 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108901 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
108951 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109001 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109051 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109101 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109151 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109201 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109251 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109301 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109351 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109401 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109451 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109501 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109551 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109601 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109651 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109701 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109751 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109801 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109851 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109901 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
109951 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT
110001 TGTCTCTCT TGTCTCTCT TGTCTCTCT GGTCTCTCT TCACTCTCT

FIGURE 3, page 31 of 122

110051 GCAAGAGG TGAG GAAGG ACTCAGAT TAAGTGGT TCCTGGAGAA
110101 CTGAGTTT CAATTTACT TATTAGTTC CTTTAACTG CTTCCTTAAAC
110151 TGTCTT TGA TGTGTATTTC GTTCTTAAAG ATTCTTGTG TCTTCTTTTC
110201 CTTATAGTGA ATATTATTTC GCTCTTAAAG TTTATATAT GGTCTATTA
110251 AAAATTAAGA TTTATTGTG CAATATAT TTAACAGAT AAAATGAAG
110301 TTAAGTAAAG TAAATTTT TAAATAAAT TAAATATTT AGSTTAAAT
110351 AATTTTCT TAAATTTT TATTATTT AGSTTTTAT TGTATTTTA
110401 TTTTATTGA TAAATATTT TTTTCTTGA CTAAGT TGG AGTAAATTT
110451 CAAATTTCTG GTTCAAGTGA AGTCTCAAT CTAAGTCTA TCCATTTCT
110501 CTAATTTGA TCTCAAGTGA GTTCAAGTGA CTAAGTCTA TCCATTTCT
110551 TAAATTTT TTTTATTT TTAATAGGA TGGTCTTGA CTTTCTTAA
110601 CAAATTTCT TTAATTTCT GATTTATTA TCAATTTCT TCAATTTCT
110651 AAAATTTCT GATTTATTT ATTAAGTAT GTATTTCT AGSTTTTCT
110701 ATTATTTAT ATTATTTCT TTTTCTTT ATTAAAGTCT ATTCTTAT
110751 CTAATTTGA TTTTATTT ACTTCAAT GATTTATTT TCAATTTCT
110801 TTTTATTT TTTTCTTT TAAATTTCT AGAAAGTAT TAAATTTCT
110851 AATTTCAAT ATTATTTCT AAAGTCTA ATTCTTCT TGTATTTCT
110901 AATTTCAAT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
110951 AATTTCAAT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111001 GTTCTTTCT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111051 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111101 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111151 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111201 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111251 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111301 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111351 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111401 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111451 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111501 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111551 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111601 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111651 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111701 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111751 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111801 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111851 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111901 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
111951 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112001 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112051 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112101 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112151 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112201 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112251 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112301 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112351 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112401 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112451 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112501 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112551 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112601 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112651 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112701 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112751 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112801 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112851 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112901 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
112951 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
113001 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
113051 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
113101 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
113151 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
113201 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
113251 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
113301 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
113351 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
113401 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
113451 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
113501 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT
113551 TATTTCTTT AATTTCTTT TATTTCTAG GGTTTCTCT CAAATTTCT

FIGURE 3, page 32 of 122

113601 GCAGCACTAT TCACATAAC AAAGATTG AACCACCAAT ATGTTCACAT
113651 AATATAGAC TCAATTAAC AATATGGA CATATAAC ATGCAATAC
113701 ATGACATTT AAAAAATGAT GATTTATGT CATTATGATA GACATGAT
113751 AATTTTAAA TATATATTCT CATTAACTA TCGCAAGGAC AAAAAATAA
113801 ACATTTATG TTCTACTTA TATGAGGAA TTGAACATG AGAATATG
113851 GACACA GAA GAAACAT TATATGAGG GCTGTGCTG GGTATGAG
113901 AGTGGTAA GATAATAT AGCAATATA CTTAATGTA AATCAATAT
113951 TAATGATG AATATATG ATATATAT GTATATAT GTAAATAGC
114001 TGATATTTT TATATATG CTTAATAT AAAGTATAT AATATATAA
114051 TAAAGGAAA TAAATATAA AAAAGACAT ATATAGTTG AATATAT
114101 AGATATAT TTTTATTT AACAATCCA TTTGATAGT SATTAAGCTA
114151 AAAAAATCAA AATATTTT CCAAAATCCA GGCATGCTG CTAAATAGT
114201 GCACTTTT TATATATTT CTTAAGGCTG TGGGATAGT TTTGATATG
114251 TCTATATTT AATATATG AATATATG TCTATATG TTTTATAGG
114301 CCAAGTATTT TTTTATTT GAATTTTGT AATATATG GTTATGAGT
114351 TATTTTAT AATATATG TATATATG CTTAAGTAT TTTTATTT
114401 GTATATTTT CTTTATTT TCAAGTGTG AATATATG AGATATTTAT
114451 CTGATATTT TTTAATATG CTAAGTATG AATATATG CATTATGAT
114501 TAGGATATG AATATATG AATATATG AATATATG CATTATGAT
114551 TATATATG TTTAATATG ATATATG TGTATATG CCAATATG
114601 GTATATTTT TATATATG CTTTATTT GTATATG TCTATATG
114651 CATTATTTT TATATATG AATATATG TGTATATG TTTTATTT
114701 TGATATTTT TATATATG TATATATG TTTTATTT GTATATTT
114751 AGATATTTT TATATATG TTTAAGTAT CATTATTTT GTATATTT
114801 ATATATTTT TATATATG CATTATTTT AATATATG AATATATG
114851 GTATATTTT TATATATG TATATATG CATTATTTT AATATATG
114901 CATTATTTT TATATATG TATATATG CATTATTTT AATATATG
114951 TATATATG TATATATG TATATATG TATATATG TATATATG
115001 ATATATTTT TATATATG AATATATG TATATATG TATATATG
115051 CATTATTTT TATATATG TATATATG TATATATG TATATATG
115101 GATATATTT TATATATG TATATATG TATATATG TATATATG
115151 AGATATTTT TATATATG TATATATG TATATATG TATATATG
115201 TGTATATTT TATATATG TATATATG TATATATG TATATATG
115251 AATATATTT TATATATG TATATATG TATATATG TATATATG
115301 TGTATATTT TATATATG TATATATG TATATATG TATATATG
115351 GTATATTTT TATATATG TATATATG TATATATG TATATATG
115401 CATTATTTT TATATATG TATATATG TATATATG TATATATG
115451 AATATATTT TATATATG TATATATG TATATATG TATATATG
115501 CATTATTTT TATATATG TATATATG TATATATG TATATATG
115551 GATATATTT TATATATG TATATATG TATATATG TATATATG
115601 CATTATTTT TATATATG TATATATG TATATATG TATATATG
115651 TATATATTT TATATATG TATATATG TATATATG TATATATG
115701 TATATATTT TATATATG TATATATG TATATATG TATATATG
115751 GATATATTT TATATATG TATATATG TATATATG TATATATG
115801 AATATATTT TATATATG TATATATG TATATATG TATATATG
115851 TATATATTT TATATATG TATATATG TATATATG TATATATG
115901 GATATATTT TATATATG TATATATG TATATATG TATATATG
115951 TATATATTT TATATATG TATATATG TATATATG TATATATG
116001 AATATATTT TATATATG TATATATG TATATATG TATATATG
116051 AATATATTT TATATATG TATATATG TATATATG TATATATG
116101 CATTATTTT TATATATG TATATATG TATATATG TATATATG
116151 CTTTATTTT TATATATG TATATATG TATATATG TATATATG
116201 AGATATTTT TATATATG TATATATG TATATATG TATATATG
116251 AGATATTTT TATATATG TATATATG TATATATG TATATATG
116301 AATATATTT TATATATG TATATATG TATATATG TATATATG
116351 CATTATTTT TATATATG TATATATG TATATATG TATATATG
116401 CATTATTTT TATATATG TATATATG TATATATG TATATATG
116451 AATATATTT TATATATG TATATATG TATATATG TATATATG
116501 AGATATTTT TATATATG TATATATG TATATATG TATATATG
116551 CATTATTTT TATATATG TATATATG TATATATG TATATATG
116601 AATATATTT TATATATG TATATATG TATATATG TATATATG
116651 TATATATTT TATATATG TATATATG TATATATG TATATATG
116701 AATATATTT TATATATG TATATATG TATATATG TATATATG
116751 TATATATTT TATATATG TATATATG TATATATG TATATATG
116801 AATATATTT TATATATG TATATATG TATATATG TATATATG
116851 TATATATTT TATATATG TATATATG TATATATG TATATATG
116901 AATATATTT TATATATG TATATATG TATATATG TATATATG
116951 AATATATTT TATATATG TATATATG TATATATG TATATATG
117001 AATATATTT TATATATG TATATATG TATATATG TATATATG
117051 CTTTATTTT TATATATG TATATATG TATATATG TATATATG
117101 AATATATTT TATATATG TATATATG TATATATG TATATATG

FIGURE 3, page 33 of 122

117151 CAATTGGGAT TGTAAGTCAT TTTAATTTTA GGGCTCTGG TGGGGGTGTA
117201 GTGATGAATC ATTGTGATTT TAAATTTGAT TTCTCTGAT TATTTGTAG
117251 TTTTAACTCC ATTTCATCTG CTTATTGAAA TGCTGATATG CTTTCTTAAAG
117301 TGATAAGAGT TAATACTTTT TTTAAAAATT GATTTTAGGT ATTCTAAGTG
117351 TGAGGCTTCA GTTAAATCTG TATCTTGA AAATATCTCTT CTTTTCATA
117401 GTTGTGATTT TCACTCTCTT AATGTATTT CTTGCTCTG AGGACAGAAA
117451 CTTTAACTTT GAATGAGTC CAATTTATTA GTTTCTCTT TATGATGCT
117501 TTTATATTTT GTTGAAGAA AGTTTCTCTA CCGTGAGATC AGGAATATAT
117551 TCTCTCATAT TAAATTTTGG TGCTCTATG TTTTCTCAT TAAATTAATG
117601 ATCAATCTGG TAAATGATTT TATTTAGCT ATAGTATAGG GGTCTAATAT
117651 CAATTTTCTT ACATAGATAT CAGCTCTCTA CATATTTTA TGAAGAAAT
117701 CACTCTCTCT CCAATAAAT TCAATGCTAT CTTGCTCTA AATCAAGTAA
117751 CCAATGATCT CTGCTCTCTT TCTGCTCTT TCTTCTCTT TCACTCTCT
117801 TCTTCTCTT CCAATGATCT AATTTAAAC TGAGCTCTT TATCTGGAAC
117851 AGGAAGCTTT TCTCTCTT CAAATTTGTT TTGCTATTA TTAGACTCTT
117901 ACATTTACAT ACAAATTTTA GAAGCTCTAT GTCATCTCT AATAAAGCT
117951 TAAAGAAAT CCAATTTGGA TATAATTTAA TTACATCTAG TTTGGGAGAG
118001 TTGATATCTT TAAATATCTG AGCTCTTAAA TCCAGAGCA TAGTATATG
118051 CTTCAATTTA TAAGATCTCT TTTATTTT TCTAGTAAIA TTTTGTAGTT
118101 TCTAGTATAG ATCTTTTCTT AATTTATTT TCTAGTATCT CAATGTTTTT
118151 TGATATCTTA AAGCTCTCT TTAAGATAT ATGCTCTAAT TGTCTGCTG
118201 TGCTAAATGG AATATCAAT TTTCTACTT TTTCTACTT TGTAAATAG
118251 GACTTCTCTA AATCTACTT TTTCTACTT TTTCTACTT TGTAAATAG
118301 TCACTCTCTA TATCTCTAT GAGAGTATTA TTTTCTCTT GCTAACTCTA
118351 CCATAATCTC TCTCTATCTA GTTCTCTAGT ACTTTAAGAT GTTCTCTATC
118401 CTCTATCTTA AATAATTAAG TATCTCTAAT TTTCTCTCT TACAATCTCT
118451 TCTCTCTAAT TCTCTCTCTA GTTCTCTCTA CTTCTCTCTA AATAATCTCT
118501 AGCTCTCTCT CTTCTCTCT TTTAAAGAA TGATATAAAG ATATCTCTCT
118551 AGATATATAT ATATATATAT ATATATATAT AATCTCTCT TCTCTCTCT
118601 CTTCTCTCTA GATCTCTCT TCTCTCTCT TCTCTCTCT GCTCTCTCT
118651 ATCTCTCTCT TATAATCTCT ATCTCTCTCT TCTCTCTCT TATCTCTCT
118701 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TATCTCTCT
118751 GCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TATCTCTCT
118801 GCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TATCTCTCT
118851 CTTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TATCTCTCT
118901 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TATCTCTCT
118951 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TATCTCTCT
119001 AAGATAGACT TAAATATCTA ACTATCTCT TCTCTCTCT TATCTCTCT
119051 AATTTTAAAT TCTCTCTCT TCTCTCTCT TCTCTCTCT TATCTCTCT
119101 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TATCTCTCT
119151 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TATCTCTCT
119201 CTTCTCTCTA AATCTCTCTA TCTCTCTCT TCTCTCTCT TATCTCTCT
119251 TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TCTCTCTCT TATCTCTCT
119301 GCTCTCTCT TCTCTCTCTA TCTCTCTCT TCTCTCTCT TATCTCTCT
119351 AATCTCTCTA TCTCTCTCTA TCTCTCTCT TCTCTCTCT TATCTCTCT
119401 AATCTCTCTA TCTCTCTCTA TCTCTCTCT TCTCTCTCT TATCTCTCT
119451 TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TCTCTCTCT TATCTCTCT
119501 ATCAAAATCT CTTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
119551 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
119601 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
119651 GAGCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
119701 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
119751 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
119801 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
119851 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
119901 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
119951 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
120001 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
120051 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
120101 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
120151 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
120201 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
120251 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
120301 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
120351 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
120401 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
120451 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
120501 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
120551 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
120601 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT
120651 TCTCTCTCTA TCTCTCTCTA TCTCTCTCTA TCTCTCTCT TATCTCTCT

FIGURE 3, page 34 of 122

120701 AAGGTGCAAGT AGCTGCAAAAC ACAAAGBTTA CCTCCGGGBC TTCTCCCATC
120751 CTTAGATCCG AGCGCTGCTA TTCTTTCGTC TTTTCTTAAG TCCTCTAGAT
120801 CTTCAAGTAG ATTTGTAAAT ATTTTGACA GOTTTCCTTG TTCTCTCAT
120851 TGGAGTATT GCTGCAAAAT ACATAGT TTT TCATTAACAC AAGAAGAGT
120901 CTTTCTGCTT ATTTTAAAA AAATGATAGA TATGTCATA ATAAGCTGAA
120951 AAGAGGAGT GATTTTCCC TTGATADGA GAATAATTC TCGACAAATG
121001 TCGAGTAGG CTCTTTCTCA TTGAGTTTAA CGAGTAAAT TTGGCATGTS
121051 GATAGAGAG CTCTTTCTT TTTTCTTTT TTTTCTTTT TGAGATGGA
121101 TTTTCTTTT TCGAGAGG TCGAGTAAAT TGAGAGATC TTGGTCAAT
121151 GAGAGTCTCA CTTTGGGGT TCGAGTATT CTCTGCTCT AGCTTTGGA
121201 GTAGTGGGA TTAATAGG CAGAGTACA CGAGTAAAT TTTTGTATTT
121251 TTAGTAGAGA GAGGTTTAA CCGATTTAGG CAGGATGCTC TGATCTCTT
121301 GAGCTTTGA CTGAGGCTG TGGGCTGAA AAGGTTTG GATTAGAGT
121351 ATAGGCTAG GAGGCTAGG CAGAGTCTT TCTTAAATAT TCGAATAAGG
121401 TACAATTGGA TCATTTAGG TTTCTTTCT CTAAATCTTG CATGATATGG
121451 TTGCTAAATG GAGTTAAAT ATTTTATTAT TTGCTAGAG AAGAACTCTT
121501 AAGGCTCTA TGGGCTTGG ATCATTTAG TGTCTGATG CCGGGAAGAT
121551 CTAAAAATTT TATGCTGGC AGAATCTCT TATGAGGACA GATTGCTGGA
121601 CTGCTTTGGA CTGAGAGGCT TTTCAATGGA AAATCTGATT TCTAGCTCTA
121651 GTTCTGATGT GAGAGGAGGA CAGTTTGA TCGAGCTAA AAATAGGCTG
121701 ATTATTAAC AGATAGTGT TATCTCTAG GAGGCTGGA GTCTACTTC
121751 CAAAGCAAT GCGAGCTAA GAGTCTTAA TGGCTCTTG GATCTAAGTA
121801 GAGGCAAAAT GAGGCTAGGA AAATGAGCTA GAGTTTCAA CTCTCTCTT
121851 GAGTATAG GAAATCTACA TGTATAGA CTGATTTAT CAGAAATAGG
121901 GTTCTTGA GATTCTGGA TCGAGGAAA CCGTAAAGG ATTTCTAGAT
121951 TCTCTGGGA AGCAAAAGT ATTTCTTCT TCTCTCTAT GTTCTCTG
122001 TTAAATGGA ACTCTGCTC TTCTCTTAA TTCAAGGAG AATTCTGAG
122051 TATAGTACT CTATGAAAA TAATCTTGG CTCTAGGCT TCTCTAAT
122101 GCGCTGAGA GTGCTCTCT CAGCTTAA AGGCTTAGAT TCTCTCTCT
122151 ATCTATAT TTATTAGCAT TGTAACTTG GCAAGTTAT CTAACTTCT
122201 TATGTTGGA TTTCTCTAT TATAAAATGG AAGTAAAGT GCTCTCTAT
122251 CTGAGAGCT TTTTGTGAGG ATTTTAAAA GTCTGCTATA TAAAGTATCT
122301 AGAAGAGCT CTGCTGATG GAAAACTCA AATAAAATA GCTATTTATA
122351 ATTAATTTTG TTTTATATT ATAATCTAT AGTAATCTC AACAGCTTTA
122401 TCTCTCTCT CTCAAGGCT TGGATTTCT ATTTCTCTG TCGCTCTTT
122451 ATTTTAAAT TCTGAACAGG CTCTCTTCAA CTCTCTCTG GGTCTAAACA
122501 GCTCTCTCA CTCTCTTCT TGGATATGG GATTTCTAAA TCTCTCTCT
122551 CACTCTGAA AGCTTTTGA AAATATAAG CTCTAGGAT TCGCTCTGGA
122601 GATCTGAT TATAGATTT GAGTGAAG CTAGGAGCT ATATTTTAA
122651 AAGCTCTCA TTAGCTATA TATGAACTA ATTTGGAAG ACTGAGCTAT
122701 GATGCTCTG TATTAATTAT TAAATATA GAGCTAAT TTAATATTC
122751 ATAAATTTG CAAATCTATT GTTAACTAT TATAGTTAT TAGCTATGCT
122801 AGGAATATT ACAGCTGGA AAATCTGAAA TCTATATTT TTTTCTCT
122851 GGAAGCTCT TTAATCTCT CAGCTCTCT CCAATCTCT TCTCTCTCT
122901 GATCTGAT TCTCTCTCT GATCTCTCT GATCTCTCT GATCTCTCT
122951 TATGATCTG TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
123001 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
123051 AGCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
123101 AGCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
123151 TAAATATAA GTCTCTCTCT GCTTTTAAA AAATATAAG ATCTCTATA
123201 AAAATCTAGA TCTCTCTCT CTCTTTAAA AAACAAACA ACAAACAACA
123251 ACAAAGTTGA AAGAGATCT GGAATCTCT TCTCTCTCT AAAGTCTCT
123301 CAAAGCTAG TCTCTCTCT CAGGCTCTCT GCTCTCTCT ACGCTCTCT
123351 TCTCTCTCT ATCTCTCTCT CTCTCTCTCT AGCTCTCTCT TCTCTCTCT
123401 AGCTCTCTCT TCTCTCTCT AAGCTCTCT ACTCTCTCT TCTCTCTCT
123451 GCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
123501 GCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
123551 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
123601 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
123651 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
123701 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
123751 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
123801 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
123851 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
123901 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
123951 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
124001 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
124051 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
124101 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
124151 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
124201 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT

FIGURE 3, page 35 of 122

124251 TCAATTTAGT ATTTTACCA SCATTTGGTG CAAATTTTGT AGGATACCA
124301 GGCACACATA GGCATATAG CAGTAAGTTC TGAAGGAGAG AGGAGTATF
124351 AGGATTATAA AGTSTTTTCA SAGITGAGAG AGGTTTGTGT TGGGCTTCAT
124401 AATATCTTAA ATTTTAGGCT CATTGAGTTS GAAAAAATAA AAGGAAATTT
124451 GGGTTTGAAG AATGCTATT TATTTTTSAT TTTTGTGCT TGGTGTGCTT
124501 CTATTGATTG GATGCTTAA TATTAAGGCA AGAAGTCTC AAGTTTGTGT
124551 GGGTCTTGA AATGGAAG CAATTGCTAT TGTGGAATG GTTCTTTT
124601 GGAATTAAGT TGTCTTTTCT TTCTCTGCTC CCAATAAAAA TTTTGTCT
124651 AGGGGCTACT TTTCAGTTA CTGTTTCTT AATTAATG TGTGTTGTTT
124701 CCAATTAAGT GTTCTTGAAG GGAATATCTG AAGTAATCTT CCAATTAAGT
124751 TTCAATTTCT CAAATACAGG TTGAGGCTAG GAGTAATCTG AGATGCTTTT
124801 TTATATGAG TAATGATGTA TTAACTAAA ATGATGCTG CACTATCTTT
124851 TGGGCTCTCT ATCATTTTCA GTTATAGT CTTATTTCTT TGTGATGCTT
124901 TGGTCTCTCT CCAATTTAGT GAATATACAA ATGTTGCTT AAGTCTGCTA
124951 CATCTAACA CAAATACATG TAATAGGCTC TGGTCTCTA TGTGATGCTA
125001 ATATTCAACA TTTTATTTCT AGGTTCTATG TGTGCTCTG AATTTTAGCT
125051 GCTTCTTTCT TGTCTCTCTA CTCTCTCTCT TGTCTCTCTT TTTTCTCTCT
125101 CTCTCTCTCT TTTATAGTCT ATTAAGTCTG TGTGAAAGTA AATGCTGTTT
125151 TGGCTTTACT TTTAATGACA AAGCTAATG GCTTTTCTCT CAACTTAACA
125201 CTCTCTCTCT AAGGAGGCTT TTTTCTCTCT TGTCTCTCTA CCAATGAACT
125251 TGATATTTCT CAGGCTTAAA GGGGCTCTAG AAGGCTTTT ACATATCTCT
125301 TTTACTTTAG TTTCAAAAA TCAACAGGCT AAAAAAGGAA CCAATGCTCTA
125351 TGTGAGGCTT TGTCTCTCTA TTTCTCTCTA TTTCTCTCTA CCACTCTCTA
125401 ATCAGGCTCT GCAAGGCTCT GAGCTCTCTA GCTCTCTCTA CCACTCTCTA
125451 AGTCTCTCT TCAATCTCTA CTCTCTCTCT CAACTCTCTA CCACTCTCTA
125501 CAGGCTCTCT TATCTCTCTA CTCTCTCTCT TCACTCTCTA CCACTCTCTA
125551 GCTCTCTCTA TTTTCTCTA ATAGTCTCTA AATCTCTCTA CCACTCTCTA
125601 CCTCTCTCTA TTTTCTCTA TCTCTCTCTA AATCTCTCTA CCACTCTCTA
125651 ACATCTCTCT AATCTCTCTA GATCTCTCTA CCACTCTCTA CCACTCTCTA
125701 TTCTCTCTCT TATTTCTCTA TTTCTCTCTA TATTTCTCTA CCACTCTCTA
125751 CTCTCTCTCT TCAAGGCTAA GGGCTCTCTA AATCTCTCTA CCACTCTCTA
125801 GGGCTCTCTA TTTCTCTCTA AGTCTCTCTA AATCTCTCTA CCACTCTCTA
125851 GTGCTCTCTA TTCTCTCTA TAAAGTCTCTA GTATCTCTA CCACTCTCTA
125901 AATCTCTCTA TGTCTCTCTA GTCTCTCTA ATTTCTCTA CCACTCTCTA
125951 ATTTCTCTCT TCACTCTCTA ATCTCTCTA TGTCTCTCTA CCACTCTCTA
126001 GCTCTCTCTA ATCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
126051 CTCTCTCTCT GATCTCTCTA TTTCTCTCTA AATCTCTCTA CCACTCTCTA
126101 GATCTCTCTA TTTCTCTCTA ATCTCTCTA TGTCTCTCTA CCACTCTCTA
126151 ATCTCTCTA TTTCTCTCTA GATCTCTCTA TGTCTCTCTA CCACTCTCTA
126201 TATCTCTCTA TTTCTCTCTA AATCTCTCTA CCACTCTCTA CCACTCTCTA
126251 ATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
126301 GATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
126351 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
126401 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
126451 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
126501 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
126551 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
126601 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
126651 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
126701 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
126751 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
126801 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
126851 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
126901 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
126951 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127001 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127051 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127101 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127151 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127201 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127251 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127301 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127351 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127401 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127451 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127501 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127551 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127601 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127651 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127701 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA
127751 TATCTCTCTA TTTCTCTCTA TGTCTCTCTA TGTCTCTCTA CCACTCTCTA

FIGURE 3, page 36 of 122

134901 AAGGAACTTT AGACCTCAAT GGCATCAGTA GGGCTTATT ATATETTAGT
134951 AAAAGTAGCA AGTACGAGG TAGGATGGAG CATTCATRA AAAAGAGAAAT
135001 AAAATTTTCT CTCAAAAAGAG AAGACACTAA TTAAGTTTAA AGTGAAAAA
135051 AAAACAAAG AGCAATTTCT TTTACTAA GA GACTAAATTT AAAAATTTGT
135101 AAGTCAATTT TATTTTAAAT TTTTACCTCT TTAGTCTTA TCAACATGGA
135151 GGTGCTAAT ATGAGAAAT ATTTTCTTGG AAATAAGTGG ATCTATATST
135201 ATTACTTAG TTATAGG GCGAGGGGAA ACTTAATTT TAAATGACA
135251 GCAAAATAT ATGATTTAA CATGATAAT GGTATATTT TTAATAATTT
135301 GGTAACTGAT ATCAATCAGA AGCAITAAGA AGATGATGT TTAAGGCAAT
135351 GATGATAATA PATTAAGGCT GTTAGCTCT TTAAGGCTC GTTGATATG GTTCTTTCTG
135401 TAAATAGTA GTTAGCTCT TTAAGGCTC GTTGATATG GTTCTTTCTG
135451 CATATATTT TTAAGGCT TATATGATTT GAAATATATG TAATGACAT
135501 AAATGCTCT ATGATGAGA AGGAGAAAGAA ATGATATG TCAAGTTAGT
135551 CAGTCTTCT AAATGCTCT TGAATGAAAT TCATTTGAAA AAAGTTCTTT
135601 TCATTTCTCT TATGCTCT TCAATTTAA CCGTAATAAG CACTCTTTAC
135651 TCTAGGATTT TAACAGATTT TTTTAAATAA CTGATTTAT GGGTATATAA
135701 AAAAGAGAG AGTCACTCT CAAAAGTCTG AAGGTCAGAG CTATTTCTGA
135751 TCTAGGCAAT TGTGCTCAG AAAGATGTTG TGAATGAGA CTCTCTCTA
135801 AGCTGCTAG AGTCACTCT ACCAAGCTCT ACCATTTCT AGAGGCTCAG
135851 CTGCTCTGTA GGTGCTCTT GATATATG GGTGCTCAG TCAAGGCTGA
135901 AGGCTCTCT TGTCTCTCT TGTCTCTCT TCAAGGCTG CAGGCTCAG
135951 CATATAGAG GAGCTCTCT TCACTGATCT TGTCTCTCT AGGCTCTCT
136001 ATGAGAGAG GGTGCTCTT TTTGCTCTT GAGCTCTCT CAGCTCTCT
136051 TATTTCTGAA GATAGATTT TATAGTCTA GGAATGAAA CATTTCTCT
136101 ATGAGCTCT GGTCTCTCT GCTAAATTT CTCTGATTT TGTGCTCTT
136151 TATAGCTCT TTAAGCTCT AAAGGCTCTG AAAAGCTCTG ATAGCTCTCT
136201 GTGAGAGAG GGTCTCTCT ACAGCTCTG AAAGCTCTG TCTTCTCTA
136251 TCTCTCTCT ATTAGATAAT CAGCTCTGAA ACTGATGAA ACATCTCTA
136301 CATAGAGAG ATAGCTCTT TTAATCTCT CTGCTCTCTG ATCTCTCTG
136351 GAGAGAGAG TCTAGAGAG TAAGCTCTG GGAATCTCTG TTTGCTCTG
136401 TGTAAATCTG AAGGAGAGAG AGAAGCTCTT AAAGCTCTG ATTTAATCTG
136451 TTTAATCTCT TTAGGCTCTA GTAGGCTCT CTCTCTCTG CTCTCTCTG
136501 ATTAGGCTG GAGAGAGAT ACCAAGCTG CAGAGAGAG ATGCTCTCTG
136551 TATAAATCT ATTATCTCT GGTAGCTCT GTGCTCTCT GAATATAAT
136601 CAGTCTCTA TCTATCTTT TTTTCTCTG ATATCTCTG TGAAGCTCTG
136651 CTCTCTCTG TCTCTCTCT CAGCTCTCT TTTCTCTCT AGGCTCTCTG
136701 TCTAGCTCT CAGCTCTCT ATGAGAGAG CATAGCTCTG GATCTCTCTG
136751 TGTAGAGAG TCTGATCTT ATCTCTCT CTGCTCTCT CTATCTCTG
136801 TGTGAGAG CTCTCTCTG GTCTCTCTG AGCTCTCTT ATCTCTCTG
136851 CATCTCTCT ATCTCTCT CTAGGAGCT TTTCTCTCT CAGCTCTCTG
136901 GAGCTCTCT GAACTCTCT TTTCTCTCT AGTCTCTCT AGTCTCTCTG
136951 GAGCTCTCT AGTCTCTCT TTTCTCTCT CAGCTCTCT AGTCTCTCTG
137001 GAGGAGAG TCTCTCTCT AGGCTCTCT CTGATCTCT GGTCTCTCTG
137051 GGTAAAGGAG GAGCTCTCT AGAAAAAGAG GTCTCTCT ATCTCTCTG
137101 AGAGAGAG ATCTCTCTCT CTGAGAGAG AGTAAAGAG ATCTCTCTG
137151 CAGAGAGAG CAGAAATCT ATTTATCTT GAAAGCTCTG AATAAGCTT
137201 CAGCTCTCT TATCTCTCT TACTGAGAG ATATCTCTG CTAGCTCTG
137251 GAAGCTCTCT TACTGAGAG CTACTCTCT TATCTCTCT AGCTCTCTG
137301 TCTGAGAG TTTGAGAG CTACTCTCT TATCTCTCT AGCTCTCTG
137351 GATTAAGAG CTCTCTCT GATCTCTCT ATGAGAGAG TGAAGCTCTG
137401 AGGCTCTCT AGGCTCTCT CAGAGAGAG CAGAGAGAG
137451 AGGCTCTCT AGGCTCTCT CAGAGAGAG CAGAGAGAG
137501 GAGCTCTCT AGGCTCTCT CAGAGAGAG CAGAGAGAG
137551 GAGCTCTCT AGGCTCTCT CAGAGAGAG CAGAGAGAG
137601 TCTCTCTCT AGGCTCTCT CAGAGAGAG CAGAGAGAG
137651 TCTCTCTCT AGGCTCTCT CAGAGAGAG CAGAGAGAG
137701 AATCTCTCT AGGCTCTCT CAGAGAGAG CAGAGAGAG
137751 GATCTCTCT AGGCTCTCT CAGAGAGAG CAGAGAGAG
137801 GAGAGAGAG ATCTCTCT AGGCTCTCT CAGAGAGAG
137851 GAGAGAGAG ATCTCTCT AGGCTCTCT CAGAGAGAG
137901 ATCTCTCT ATCTCTCT AGGCTCTCT CAGAGAGAG
137951 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
138001 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
138051 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
138101 ATATAGAGAG TCTCTCTCT TCTCTCTCT TCTCTCTCT
138151 ATCTCTCT AGGCTCTCT TCTCTCTCT TCTCTCTCT
138201 AATCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
138251 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
138301 AATCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
138351 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
138401 ATCTCTCT AGGCTCTCT TCTCTCTCT TCTCTCTCT

FIGURE 3, page 39 of 122

142001 TGGCTGTTTG GATCTCAGCA CTATGGGTAT CAGAGGAGGG CAC TCAAAA
142051 CAATAGAAA TAAAAAGAA TTTTGG GA ATGCTTTGAA CAATGAGGT
142101 CCAAGCTTGG CACCTAGAT GTTAGAGG AAGTCTCTG CCTCCATGG
142151 TCAAAAGAGG TGTAGATTG CACAGGAG TGAAAAGAGG AAATCCAGCA
142201 GAGATTTTAT GGTCTTAGCA CCACTGAGG TCTATCTTT AGCTGTCTT
142251 AAGAGAGAA TAGAGGCTGG AGAGAGGAA ATATCTTAA AACCAACAG
142301 TGGGCTAGT TTAGGCTAT GTAGAG AT GGTATCTT GTGTGGCTG
142351 CTTGTCTAT GTGTGAGGT GCAAGGAGG TGTATAATG AGTCTTCTGA
142401 GTGTGTGAG AACTATGGA GGAATAGA AATTGAGATA GAGAAACAG
142451 TCTGTCTAAT GGTAAAGCA TTGATGG GAATTAAT TTTTGCATA
142501 GTCTATCTT GTCTCTTAC AGAGAGGAA ACAGAAAT TCTATTTAAG
142551 GAGAGAAATA GTCTCTCTG TCTCTTCTG TTTTCTTGA CATTGATTGA
142601 AGCTCTAAT GCAAGAGCT CTTCTTCTG TTAGATATAT ATCTGAGAA
142651 ATGAGAAAGG GCTCTGCTG TCAAAATTT GTCTTAAAG GGAACATCT
142701 AGATAATGAA TTAGCTAATA AATGATTAGA TACATCTTG TCTTCTAAG
142751 CATCTCTTG GATTCACAC ATTCTCTAGA CTCTCTTAA AGACTCCAC
142801 TCACTCTCT GGTAGTCAA AACTCTCTG CCACTAGCT CTTCTCTGAT
142851 CAATCTATAT ATTCTCTCT ATATCTCTT TCTCTCTGG ATACCAGAT
142901 CAAGAACTAA TCTCTCTTG TTTCAAACT GTTTATATT CTTCTCTTT
142951 ATTCTCTTG GACAATTTA TTAAGATGAT CTGAACTAGT GAAATATGAG
143001 TCAAAAGAA AGCTCTTTT CTGAACTAA ATCTTTTGA AAGGCTATG
143051 GATCAATGAT TAAATCTAT GTAAATAGG GTATCAGAGA GAGGACTGA
143101 AGCTCTGGA AAGGCTGGA AGAAATCTA AACTTATAT TATTTTATA
143151 GTCTCTGAA GTCTCTGATA TCAAAATAT GATTAATGA TGTCTCTAC
143201 AGTCTTTAA TTTTCTTG TATTTCTT AATTAATCTA ATGCTCTAC
143251 AGCTCTAT AGTTAGAGG GTCTGAA TG TAATTAAGG TTTGAGTAA
143301 GTCTCTGAA GATTAAGG TAAATCTT GATCTGAGAG AGCAGGATGA
143351 GTCTCTGAA GATTAAGG TAAATCTT GATCTGAGAG AGCAGGATGA
143401 TAGGAGAGAA GATTTCTGG GATCTGAA GATCTGAGAG AGCAGGATGA
143451 ATCTCTGAG AGCAGGAGAT GAGGAGAGG GATTAATGA GCTTTTCTG
143501 GTCAAGAGAG CTTAGACAGT GAGGAGAGG AAGGCTCTG CAAAGGAGT
143551 GAGGAGTAT TCAAAAGCAT ATGAGAGAG ATGAGGAGT TGAGGAGATC
143601 TCTCTCTGAG GATCTGATTT GATCTTAA AAGGAGTCT TGGCTCTAG
143651 ATGAGAGAGT GATCTGAGAG GAGGAGAGG AAGGAGAGG GGTGAGGGA
143701 GAGGAGAGT AAGGAGAGG AGGAGAGG TAAAGTCTAA TAAGTCTAA
143751 GTGAGAGAGT AGGAGAGG GAGGAGAGG GAGGAGAGT AAGGAGAGT
143801 TAAAGGAGG ATCTGAGAG CATTTCTAA ATCTTCTAG GAGGAGATC
143851 CATCTCTT TTAGTCTAT CTCTCTGAG AATTTCTAG CTAATTTCTG
143901 AAGGAGAGT TCTCTCTAT GAGGAGAGG TCTCTCTAT AATCTCTAG
143951 CTCTCTT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
144001 AGGAGAGT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
144051 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
144101 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
144151 GAGGAGAGT AAGGAGAGG AGGAGAGG TAAAGTCTAA TAAGTCTAA
144201 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
144251 GAGGAGAGT AAGGAGAGG AGGAGAGG TAAAGTCTAA TAAGTCTAA
144301 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
144351 GAGGAGAGT AAGGAGAGG AGGAGAGG TAAAGTCTAA TAAGTCTAA
144401 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
144451 GAGGAGAGT AAGGAGAGG AGGAGAGG TAAAGTCTAA TAAGTCTAA
144501 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
144551 GAGGAGAGT AAGGAGAGG AGGAGAGG TAAAGTCTAA TAAGTCTAA
144601 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
144651 GAGGAGAGT AAGGAGAGG AGGAGAGG TAAAGTCTAA TAAGTCTAA
144701 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
144751 GAGGAGAGT AAGGAGAGG AGGAGAGG TAAAGTCTAA TAAGTCTAA
144801 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
144851 GAGGAGAGT AAGGAGAGG AGGAGAGG TAAAGTCTAA TAAGTCTAA
144901 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
144951 GAGGAGAGT AAGGAGAGG AGGAGAGG TAAAGTCTAA TAAGTCTAA
145001 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
145051 GAGGAGAGT AAGGAGAGG AGGAGAGG TAAAGTCTAA TAAGTCTAA
145101 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
145151 GAGGAGAGT AAGGAGAGG AGGAGAGG TAAAGTCTAA TAAGTCTAA
145201 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
145251 GAGGAGAGT AAGGAGAGG AGGAGAGG TAAAGTCTAA TAAGTCTAA
145301 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
145351 GAGGAGAGT AAGGAGAGG AGGAGAGG TAAAGTCTAA TAAGTCTAA
145401 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG
145451 GAGGAGAGT AAGGAGAGG AGGAGAGG TAAAGTCTAA TAAGTCTAA
145501 TCTCTCTAT TCTCTCTAT TCTCTCTAT TCTCTCTAT AATCTCTAG

FIGURE 3, page 41 of 122

149101 TCTTCAGGGT TGASTTCTGT AATGGATST AAATCTCTTT TCCGCGGAG
149151 AAAAGGCTGA GAGATCTGG TCTTGATGT GGAATACATT AAGGCTCTTG
149201 GCGTTTGAAT GCTATCTAA GAGACAGCT CTCATTCTCA GTTGCGCTAA
149251 GCTAAAGAGG AGTGTAAAG TTGAGTGAAG TGAAGCAAG GGGAGTATTA
149301 GCTATCTCTG AGAGCTTGG AGCTAGATG GGTAACTTAA TTGAGGGA
149351 TATTAAGTAA ATAGAGTAC CTCTGAATTT TCGTATTCT CTAGCTAGCT
149401 CTTTATGAGT TATGATTAT TATATTAGCA GAAATATAG SATTTGAGGA
149451 GCTCTCTCTG TCAAGGCTG TTAATCTCA ATTTCAGGAG AAAAGCTATA
149501 AATATACAAA AASTTACTTG ATATATATA ATAAATAAT CATTTATTT
149551 AGTGAAGAA ATGTATAGA AAAAGATGG GTCAATTTAG TATTCAGAGA
149601 TTAATAAGG TAAATCAATT GATTATTC ATTATTCTC ATATTATTT
149651 ATGCTTAAAA ATATTCTTA CTATTATGG GAACTTTGA AAGGATATG
149701 AATATATAA TAAGCTTTAT GAGGCTAAG GCAATCATCG TTTTATTAT
149751 CACTTATTC CAGATCTCT AGCTATAGA GGAAGAGGA GAGCTAGCT
149801 AGATATAGAT CTTTATTTAA TACTAGCTG TTAATGTAT GTAGTCTTA
149851 ACATATTCT GAGATTTAT AGAGTCTTA ACATGATTT GGGCTTAAT
149901 TTATGAAAGA CTCAATCAG ACATTAAGA GAGATCTCT GCTTGATAT
149951 GAGAGCATG CATCTCTCT CTGTTCAAG CACTTAATT TCTCTCTGG
150001 TGATAGCTTA GTAAGCTGA TAGTTCTCT GCTTCTCTG ACCGAGGAG
150051 GAGATAGAG CAAGCAAGG TAATTTTGA CTGTGTAAG AGTTATCTA
150101 AATGCTGGA GCAATCTGA GAGCTAAG AGATCTCTA TGAATCTCT
150151 ATATCTAGT TTCTAGAGT CTGCAATTT CTCTCTATA TGAAGCTTT
150201 TTTCTAGTG GGTCTCTCA TATCTTTCA AAATTTCTT CTATAGATT
150251 ATAGAGCTA AACTAATAA GAGAGCTCT TAGATAAAA ATTGATAGA
150301 CAGAGCAAT TTTATCTCA TTTAAAGAT GGGTGGAGC TTTTATTTA
150351 TAGTATGAG TAGGAGCTG TAAGGCTCT TATGAAGAG ATGCTATCTG
150401 AGCTTAAAT TTAAGAGATG GAAAGCATT GAAAGATCT TTAAGAGAG
150451 AAAGTAGAG GAGAGAGCT TGTGAGGCT GAGAGAGAG TATGAGCTA
150501 GAGAGAGAG CTAGAGGAG GAAAGAGAG AAAAGAGAG AGCTCTCTG
150551 TGAAGCTAG TGAAGCTAG GAGAGAGAG TGTCTCTCT GCTATAGAG
150601 TTAAGCTAG TGTCTCTCT GAGATTTCT AGCTTATCT ACTGAGCTC
150651 AAAGAGCTT GCTCTCTCT TGTCTCTCT ATGAGCTCT GCTGAGCTA
150701 GAGATCTAG AGAGAGAGG TTTTGTGAG CAGAGCTAG GCTGAGCTT
150751 TAGGCTAAG TATGCTAGA GCTCTCTAG CAGAGCTAG ACATGAGAG
150801 TGAGGATAG CTTAGAGAG CTCTCTCTT CCTCTCTCT GCTATAGAG
150851 CTCTCTCTG AGCTCTCTG CTCTCTCTT CCTCTCTCT GCTATAGAG
150901 TGTCTCTCT GCTCTCTCT TGTCTCTCT CTCTCTCTT GCTATAGAG
150951 CTCTCTCTG GCTCTCTCT TGTCTCTCT CTCTCTCTT GCTATAGAG
151001 CTCTCTCTG GCTCTCTCT TGTCTCTCT CTCTCTCTT GCTATAGAG
151051 TGTCTCTCT GCTCTCTCT TGTCTCTCT CTCTCTCTT GCTATAGAG
151101 AGCTCTCTG GCTCTCTCT TGTCTCTCT CTCTCTCTT GCTATAGAG
151151 GCTCTCTCT GCTCTCTCT TGTCTCTCT CTCTCTCTT GCTATAGAG
151201 TGAAGCTAG TGAAGCTAG GAGAGAGAG TGTCTCTCT GCTATAGAG
151251 TGAAGCTAG TGAAGCTAG GAGAGAGAG TGTCTCTCT GCTATAGAG
151301 GAGATCTAG AGAGAGAGG TTTTGTGAG CAGAGCTAG GCTGAGCTT
151351 TGAAGCTAG TGAAGCTAG GAGAGAGAG TGTCTCTCT GCTATAGAG
151401 AGCTCTCTG GCTCTCTCT TGTCTCTCT CTCTCTCTT GCTATAGAG
151451 ATCTCTCTG GCTCTCTCT TGTCTCTCT CTCTCTCTT GCTATAGAG
151501 GCTCTCTCT GCTCTCTCT TGTCTCTCT CTCTCTCTT GCTATAGAG
151551 GCTCTCTCT GCTCTCTCT TGTCTCTCT CTCTCTCTT GCTATAGAG
151601 GCTCTCTCT GCTCTCTCT TGTCTCTCT CTCTCTCTT GCTATAGAG
151651 GCTCTCTCT GCTCTCTCT TGTCTCTCT CTCTCTCTT GCTATAGAG
151701 GCTCTCTCT GCTCTCTCT TGTCTCTCT CTCTCTCTT GCTATAGAG
151751 ATAAATATA AAATATGAG TGGAGGATG GCTTTTCTT CAGATCTCT
151801 TTTGAGGGA TCTCTCTCT GAGATCTAG GCTGATGA AGAAATCTT
151851 TCTCTCTCT AAATGATCT AAAAGTAA TGAATGCTA CATTAAGTA
151901 TGAAGCTAG AGCTAATCT TGAAGCTAG GAGAGGCTT TGGAGCTA
151951 GCTCTCTCT ATCTCTCT CTCTCTCTT CTCTCTCTT TGGAGCTA
152001 GCTCTCTCT AGCTCTCT TGTCTCTCT CTCTCTCTT TGGAGCTA
152051 GCTCTCTCT CTCTCTCT TGTCTCTCT CTCTCTCTT TGGAGCTA
152101 TGTCTCTCT CTCTCTCT TGTCTCTCT CTCTCTCTT TGGAGCTA
152151 ATCTCTCT ATCTCTCT TGTCTCTCT CTCTCTCTT TGGAGCTA
152201 TTTTCTCT CTCTCTCT TGTCTCTCT CTCTCTCTT TGGAGCTA
152251 ATCTCTCT ATCTCTCT TGTCTCTCT CTCTCTCTT TGGAGCTA
152301 ATCTCTCT ATCTCTCT TGTCTCTCT CTCTCTCTT TGGAGCTA
152351 ATCTCTCT ATCTCTCT TGTCTCTCT CTCTCTCTT TGGAGCTA
152401 ATCTCTCT ATCTCTCT TGTCTCTCT CTCTCTCTT TGGAGCTA
152451 ATCTCTCT ATCTCTCT TGTCTCTCT CTCTCTCTT TGGAGCTA
152501 TGAAGCTAG TGAAGCTAG GAGAGAGAG TGTCTCTCT GCTATAGAG
152551 TGAAGCTAG TGAAGCTAG GAGAGAGAG TGTCTCTCT GCTATAGAG
152601 TGAAGCTAG TGAAGCTAG GAGAGAGAG TGTCTCTCT GCTATAGAG

FIGURE 3, page 43 of 122

163301 GGGGCGASTC AGGGATTGGA ATTSCASTTT TCANTTCAAG CAGGATAAGA
163301 TAAATAGTTAA GAGTAGAGAT AAAACAGAGT TGGTAGGCTT TCAAAATCCCA
163401 GGTTCATATAT TTAATGGGTTT TGTAGTTT GAGAGTTT TAAATTTTCT
163401 AGATTTTAAAG TTTTGTATCT GTAAATAG GATATATAT ATAAATATAG
163501 CCAATTTTAA AGGCTCTCTG TGAGAGTTAA AAATATCAT ATATGTAAAG
163501 CAGTTAGAAC AGAGTCTGCC TATAATAG TGTACAAAT ATATGTAAAG
163601 CTAATTTTCT TATTCCTAGT GGTATCTAG AGAGTTTCT TGAATCTATT
163601 TGTCTTTTCT GCATAAGTGA ATCTCTCT AAAATGTGAA TGAAGGCTCT
163701 TGTCTATAAA AAATGATAAA AAGTAAAT AGAGTATCT ATGAAAAAG
163701 TGATCTATAT AGAATATAG TATTAATAT ATTTCTTCTG TGTATATCT
163801 ATATATATAT CTATGCTAAG AGCTCTAT GTATAATCT ACCTCTATCT
163801 CATATCAAT TTTTAAAAA GCTTTTTT ATTTCTTCT TTTATAGATG
163901 AAATAAGAG AGATTATAT TGTCTAAT TGTACAGTA GCATATGATA
164001 AAAATAGAAC GTCAAACTA TCTTCTCT GGTCAAAAT CTAGCTCTCT
164001 AAAATAGAAC GTTCTCTCT TCTCTATCT ATAAATTAAT CCTCTCTCA
164101 AGAGCAAACT TGGTCTTCT AAAAGAGTAA GGTCTTCT TGGCTATTTT
164101 AGATCTAGT ATATTGACAT TTTTAAAA TGTCTCTCT ATCTATTTT
164201 AAAAGTAAAG CCAAGAGTT TAAAGATCT TGAATCTCT TGTATCTCT
164201 GCTTATGTTT ACATTTTATA GATAGATCT TGAATCTCT AATTGATTA
164301 GTTATTTCT TTAGACAAAT AATGATCT AGTAATCTCT CTACAACTTA
164301 TATTTCTCT TTAGAATCT ACATTTCT TGTCTCTCT CTATCTCTCT
164401 TTAGAGTCT GGTAGCTCT CTGCTCTCT TTAGAGTCT GGTAGCTCT
164401 AGATCTCTCT AAAATTTT CCAATTTCT TGAAGTCTCT AATGATCTCT
164501 CAAATTTCT AATAGGCTCT TAAATCTCT TGTCTCTCT CAGCTCTCT
164501 CCAATTTCT TTAAGCTCT ATGATCTCT GATTTCTCT TTTATTTCT
164601 TCTTCTCT GGTCAATCT CTTCTCTCT TGTCTCTCT CAAATTTCT
164601 ATCTAATCT TTTCTCTCT TGAATTTCT GATAGTCTCT TCAATGATCT
164701 CTCTAAGTCT GTTCTCTCT TGAATTTCT TGTCTCTCT TATAGATCT
164701 CATCTCTCT ATAGAGCTCT TTAAGTCTCT GAAAGTCTCT TGTCTCTCT
164801 CCAAGTCTCT ATGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
164801 TGTCTCTCT CTAGCTCTCT ATGTCTCTCT TGTCTCTCT TGTCTCTCT
164901 CATCTCTCT TATCTCTCT AATCTCTCT AAGAGTCTCT GGTCTCTCT
164901 GTAAATCTCT GGTCTCTCT GATCTCTCT TGTCTCTCT CAGTCTCT
165001 AGATCTCTCT AATTTCTCT TATCTCTCT CAAAGTCTCT AAAAGTCTCT
165001 TTAAGTCTCT AATCTCTCT AATCTCTCT AATCTCTCT CTTCTCTCT
165101 TATCTCTCT ATCTCTCT GTTCTCTCT TGTCTCTCT TGTCTCTCT
165101 GAAATCTCT TATCTCTCT ATTTCTCT TGTCTCTCT GATCTCTCT
165201 AAAATCTCT TCAATCTCT TGAAGTCTCT TGAAGTCTCT CTTCTCTCT
165201 CATCTCTCT TGTCTCTCT ATAGCTCTCT TGTCTCTCT TGTCTCTCT
165301 TAAATCTCT TTTCTCTCT GATCTCTCT TGTCTCTCT GATCTCTCT
165301 GATCTCTCT GATCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
165401 GATCTCTCT GATCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
165401 TGTCTCTCT GATCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
165501 ATATCTCTCT CTTCTCTCT ATTTCTCT GATCTCTCT CAATCTCT
165501 TGTCTCTCT GATCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
165601 GATCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
165601 GATCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
165701 AAGCTCTCT AGGAGTCTCT GATCTCTCT AGGAGTCTCT ATAGATCTCT
165701 GATCTCTCT GATCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
165701 GATCTCTCT GATCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
165801 ATCTCTCTCT GATCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
165801 ATCTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
165901 ATCTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
165901 ATCTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166001 GATCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166001 GATCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166101 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166101 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166101 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166201 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166201 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166201 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166301 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166301 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166301 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166401 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166401 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166401 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166501 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166501 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166501 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166601 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166601 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166601 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166701 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166701 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166701 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166701 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT
166801 TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT TGTCTCTCT

FIGURE 3, page 47 of 122

166851 TCCA ATCT ATCTATTAACT TCATCTSTTT TTCCAATCAG CGAATATTBT
166901 CATSAAATAT TCATCTCAAAT ATAAATTTTC CACCTAAGAA AGAATTTCCA
166951 CATACAAATA AGGCTTATTA AAGAAAGAC GAACTGATTA TTTGAGATGG
167001 GTCTTTTGGG TTACAGTAAAT AGCAATTTAC GTTTGGAATC AGACAAAACT
167051 CATTTCAAAT TCCTSTATCTG CCACTTAACT GTTSTAAGAT TACAACTTAC
167101 AGAGCTATAA TAAATAGGAG TCCATCTATA TTTCTTATTT GTAAATTAAG
167151 CATCTAATA ATGCTACATAT TATGGAATG TTGGGATATT GTATTCTAG
167201 TACCTAAGGT AGGCTACATT CTAACTATTC GATATCAAT GCGCTTATTA
167251 GTCTTTTCTT GTTGGCTTTA ACTCTTAACT TCAITTAATA GTCTTAACT
167301 ATTATCTTTT GTAGATTATA AGCTTAAATA CTGCAGCTTC TCAGTTAAAG
167351 TACATTTTTC CAAATCTGAT TASTAATACT CTGCAGCTTC TCAGTTAAAG
167401 TCTTTTGGAG GTTTTGGGAT CTACTTTTTC TCTCTCTTTC CTCTCTCTTC
167451 TGAATTAAT GGGTGGAAAG GCGAATTTAG GCGTGTATA ATGAATCTTC
167501 GCAATATTAAT ATTTTATAT TCTTCATAT CCACTCATTA AAACATACTA
167551 CACTATTTAT GAACCTCTAA CTCTCTCTTC AAGATAGCAT ACTGCTGGGC
167601 ACGGCTATAT CATCTTCAAT ATTCTGATTT TAATTTGGCT TCGCTTTTTC
167651 CAAATAGGAC AAAATCACTA CATTTTTCAA TTAATGCAAG ATGCTTTTAT
167701 CTCTCTGCTT TGGCTCTCTC ATTTTCACTC CAGTCTATAT TTTATTTCTT
167751 ATAAATATAT TCACATATA ATTACATTA TATTGACAAA ATTTTAACTA
167801 GAAATCACTT CCAAGTATGA ACAAATATAT GTCCATTTAG TTTATATTTA
167851 CTCTCTTATA TGGCATAGAT AAGTTTCTTT TAAATATAT ATATATATAT
167901 ATCTCTTTTA ATCTACTATA CATCATTTTA TCGAGTCTTA CTCTTTTATA
167951 TATTGAAAG ATAACTAACT ATCAAAATAT TTTTCTATA TATTATATTT
168001 TACCTATAG CACATATAT TAACTTTT CTCTTCTTAA CATTATTTCT
168051 GTCAATTTA TTTTCTCTTC GTATCTTTT GTACTCTTAC CTCTTTTCTC
168101 ATGAATTTTA ATCTTTTAC CTCTTTTATC CAAAGCTAAA TCTATTTTAA
168151 TTTCTCTTT AGCTCTCTTT TTAAGCTTT TATTSAGAAA TATTTTATAA
168201 AGCACTAAAT TCATCTCTTT AAGCTTAA ATTAATATAT TTTCAATATA
168251 TTAATTAAGT TATGAAGCTA TCATCTCTCT CTATTTTAA AAPCTTCTAT
168301 CACTCTTACG AGAATCTCTT TACTATTTAG CAATCTCTCT TTTATCTCTC
168351 CTAACTCTCT CCACTCTCTG GCACTCTTAA ATTTACTTTC TATCTCTCTC
168401 TATTCTCTG TTTCTGAGCT GTATATATG TGAATCTATA CAAATCTCTG
168451 TCATTTCTAA TTGAATCTCT TCATCTCTCT TAACTTTTC AATTTTCTC
168501 CATCTCTCTC CATCTCTCTC TATCTCTCTC CTCTTTTATC CCAAACTATA
168551 TTTCTCTCTC AGCTATCTCT ACATTTCTCT TATCTCTCTC TCACTCTCTC
168601 CATCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
168651 AAATCTCTCT GTACTCTCTC TTTCTCTCTC TATATACTA GGCATCTCTC
168701 TATCTCTCTC TATCTCTCTC CTATCTCTCT CATCTCTCTC AACTCTCTCT
168751 TCACTCTCTC AAGCTCTCTC ATCTCTCTC AAATTTCTCT CAACTCTCTC
168801 TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
168851 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
168901 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
168951 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169001 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169051 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169101 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169151 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169201 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169251 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169301 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169351 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169401 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169451 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169501 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169551 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169601 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169651 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169701 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169751 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169801 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169851 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169901 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
169951 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
170001 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
170051 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
170101 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
170151 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
170201 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
170251 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
170301 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
170351 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
170401 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
170451 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC
170501 ATTTCTCTCT TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC TTTCTCTCTC

FIGURE 3, page 48 of 122

177501 AAGCAGGCGAT TTATGTGTTT CTCTTAAAA STTTTTTCTT GA'ACTTCTT
177551 ATTTATGAC TCCTTAA TAAGCTA AC AAAAAA TCA ATAAGAA GAC
177601 CTCTTGAAT TAAGAA AA AAG TAAGG TGAGTCTTA CA'GATTGAA
177651 ATTTATAAAA AATATATAG AGCTGAA GAAACTTTT GTTCTT TAT
177701 TCTTCAATAT ATATTAA A TCAAGCTTA TCAAGTACT GCTTGTGAC
177751 CTCTTGAAT TAAGAA AA TCTTGA GAGTCTTA TCAAGTACT
177801 AATATGAA AGCTGAA AATTTAAAG AAAAA TCA GAGGCTTA
177851 GAGGCTTA AATTTAAAG TCTTGAAT AATTTAAAG TATTTGAA
177901 AATTTAAAG AATTTAAAG AATTTAAAG CTCTTGAAT GCTTGTGAC
177951 TCTTGAAT AATTTAAAG TCTTGAAT GAGTCTTA TCAAGTACT
178001 AATTTAAAG AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178051 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178101 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178151 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178201 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178251 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178301 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178351 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178401 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178451 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178501 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178551 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178601 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178651 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178701 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178751 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178801 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178851 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178901 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
178951 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179001 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179051 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179101 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179151 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179201 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179251 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179301 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179351 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179401 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179451 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179501 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179551 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179601 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179651 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179701 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179751 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179801 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179851 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179901 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
179951 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180001 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180051 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180101 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180151 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180201 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180251 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180301 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180351 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180401 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180451 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180501 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180551 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180601 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180651 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180701 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180751 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180801 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180851 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180901 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
180951 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC
181001 TCTTGAAT AATTTAAAG TCTTGAAT TCTTGAAT GCTTGTGAC

FIGURE 3, page 51 of 122

181051 GGATGATATC TAAGATACAT TAGAGCTATC TGAGGATCGA TTTTATTTT
 181101 TTAATAGCTT TAAAAATACA ATATATTAC ATGATAAAC AGATATTACA
 181151 GAAGGTATA ANGTAAGA TAAATGCA TTCTTCGA TTCTATCTT
 181201 CATAAATA AGTATTTTAA AGCTTTTC TGCAATTCGT TATTTAATGG
 181251 TTTCTTTAT ACTTCTAAT CATATATTTA TGTTTCTTT TCTTGTCTTA
 181301 TCAGTTTAA CTGATATAT TACTTCTAT TAGAAAGAT ACAAAATCA
 181351 TCATATTACA CAGTAAGAT GGTCTCTA ATSTTCTTA TCTATATCT
 181401 TATTATTTGG AATCTTTCT ATGATTAGT TGTATTTTT ACATAGTGA
 181451 CATTATTT TGATTAACA TATTAAGT TTGTCAGAA TAGAGATAT
 181501 CATTCTCTT TTAAGCTA TGAATATA AATCTTGGG ATGTTTATT
 181551 TTAAGAGTG CTTAAGGTA TCTGATAT TCTTCAAA TCACTTCTG
 181601 AGATTTTAA GTTATTAT TAAATTTTT GATTTAATA ATAGAGTAG
 181651 AGAGAGATC CTTCTTAC GATTTATAG TCACATATG GCAATCTGA
 181701 AATGATCAT AGTTCAGAA AGAGAGACA AGAACACAGT GACCTAATAG
 181751 CTTAGGAGC TCAATGATA CTAAGCTTCA CTTTAGCTCA TAAAGCTCA
 181801 CTTAAGAGAG AGCATCTCT AGCACTCTG GGAGGTCTG GGAAGGAGAG
 181851 TGCTTTTACA CTTGATCTT TCTGCTGAAT AGCTCAAAA ACATCTGAT
 181901 AATCTGAAA ACAAGTACT TGTAGATTAA TTTGATTTT TTTTGTCTG
 181951 TAGTAAGAT ATATAGAGCA ATCTCTCTG CATTTCGGA CATGTTGTAA
 182001 ATAGGCAAG TGGTCAAG AGATAGTAA TCAAACTTG TAGTTAAAT
 182051 TTTAATAGA ATATAATTAG CAATTAGTA TTTTATATA ATACTATATA
 182101 ATTAATAGTA CAAATAAAGC ATATAAGAA AATGTTCTA ATTAACAAAT
 182151 ATTACCTTT AAGTTTTTT TAAATAAAT GCAAGAGAA ATTACAAAT
 182201 TATTAAATTA AATTTATT AATGAGATT CCAAGGCAA CAGATGAT
 182251 CAATCTGAT TTTGATAAA CAGTGGGCA AAGATTTAAT ACCTTTATTT
 182301 CAGCTCTCT AGTAAAGAG AGATTTCTG AGGTTCTTT TCTTAAATTA
 182351 TGAAGAAAT TACTCTGTA AGTATAATAG AGTCATTCT TAGGATTA
 182401 AAGTATTGTA GAGATGAGG ATTATTATC CAGAGTCAA ATCTGAATA
 182451 GGAGGGAAGA TGTAGTAT TAGATGAGA TATAGTCTAT GACACAAAT
 182501 TATTCTATA TTTCTCTCT TTAATTAAC ATCATAGTA TGAGTTGTT
 182551 TTATCTATT CTGCTCTCT TTTCTTAGGA GGGGATGGG GTTCTGTTG
 182601 GAGCTTTAT TACTTCTAT ATAGTAAAT AAGGTTTCTG TCACTAATC
 182651 TTTTCTGAG ACATCTCTCT GACAAGATT AGTCTGATTT ATGCTGAGCA
 182701 GTGAGGAAA CTGGGCTAT TCTTCTGCT TCCATTATCT CTGATGGA
 182751 AGATCTCT ATGAATCTG CAGGATTTG TTGATATTT TCAAGAGATA
 182801 GAATCTGAT GGTGAGATA TTTCTATT CAATCTCTCA CTAGTCTCT
 182851 TATCAAGATG TTTCTTTAA AGTCTTAA AGATATGAGA AATCTCTCA
 182901 CTGCTCTCTA GCTTTTAA AGTCTCTG TAACTCTCT CTAGATCT
 182951 ATAAGCTCT GGAATCTATA TCTGATAG GAACTCTCT CTGATCTCT
 183001 CTTATCTAT GGTCTCTCT AATCTCTCT CAAATCTCT ACATCTCTA
 183051 AACTCTAAAC TCTCTCTCT AATCTCTCT AATCTCTCT CTATCTCTA
 183101 CTTATCTCT TCTCTCTCT AATCTCTCT CAACTCTCT TATCTCTCT
 183151 CTGCTCTCTA TATCTCTCT GATCTCTCT CTTCTCTCT TGAAGAAAT
 183201 CTCTCTCTT TATCTCTCT TCTCTCTCT ATATCTCT CTCTCTCT
 183251 GGTCTCTCT TCTCTCTCT AGCTCTCT AGGCTCTCT AGTCTCTCT
 183301 AAAAAAAGG TCTCTCTCT TGAAGAAAT ACATCTCT GGTCTCTCT
 183351 AGCTCTCTG AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 183401 AGCTCTCTG AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 183451 TCTCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 183501 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 183551 AGCTCTCTG AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 183601 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 183651 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 183701 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 183751 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 183801 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 183851 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 183901 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 183951 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 184001 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 184051 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 184101 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 184151 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 184201 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 184251 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 184301 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 184351 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 184401 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 184451 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 184501 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT
 184551 GATCTCTCT AATCTCTCT TGAAGAAAT AATCTCTCT GGTCTCTCT

FIGURE 3, page 52 of 122

188151 CCCAAATGAA CCAACATTTT AAAAATTCTA AGATTTCACA CAGAAACCTA
188201 GAAT CTGCTT TTTT TTTAA AAATTATAAT TSCATTAAT AACI AAG
188251 TTCAAGGAGG TTAGCATTTGA CTAG ATGCT CAAGGAGAG CACCATATCT
188301 CTTCAATAT TATGCTTTT AGGATAA TTTCTGATTC ACBAATCTCT
188351 GCGATATGTA TACCATTAAT TTGGTAAAT GCACATCTTT TCCATTAATA
188401 GAAAGAGCT TCCAAATAG AGCAATGAAA CTTGCTTTCT TTTAAATCT
188451 CTTTGATAT TAAATCTCT CATTCTTCT ACTAGTAA CTTCTGCTCT
188501 AACTAGAGAG GGGTAAAT CATTCTTCT ACTAGTAA CTTCTGCTCT
188551 GCAAAATAT TATATATCT CTTGAGGAAA TCTTGCTAT TCTTGAATA
188601 ACCTAATCT TCTTGAGGCT CAATCTAT AGATCTATAG AAT TGAAG
188651 CAGCTAAGAG CACCAATCTT TCTGCTAT TATAGTAA CTTCTGCTCT
188701 TTTAGGATC AATCTAAT AAAATAGAG TATCTTAAG AAAAGGAGAA
188751 AAATGCTTGA AGCTAGAG AGCTAATCA TCTTCTCTCT TCTCTCTCT
188801 TAGTATAAT TGAAGCTTAT AAAAAAGAAA AATGATAT AATCTGAT
188851 TCTTGATCTG TAAAGCTCT ATTTCTCTCT TACCAATTTT CTTGAGGAG
188901 GAGAGCTCTG CATTCTCTCT CTATGCTGAA GGGACTTGA ATACAGAGG
188951 ATGAAAGCTA ACCATCTTAA TCTCTCTCT GAAATCTCT CTTCTGCTCT
189001 TGATTTCTCT GATTTCTCT TTTCTCTCT GATCAGCTCT TATGAGAGG
189051 TGCTGATCTG GATCTCTAA AATCTCTCT AGTCTCTCT ATACTCTCT
189101 CTTGCTCTCT AGCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTCT
189151 TAAAGGCTCT GATCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
189201 ACAAAGCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
189251 TCTCTCTCT GATCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
189301 CTGCTCTCT ATCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
189351 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
189401 CAGCTCTCT ATCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
189451 GATCTCTCT GATCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
189501 CTTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
189551 AGCTCTCTCT GATCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
189601 AATCTCTCT GATCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
189651 CAGCTCTCT GATCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
189701 TGAGAGAGAG ATCTCTCTCT AATCTCTCTCT CTATCTCTCT TCTCTCTCT
189751 AATCTCTCT GATCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
189801 TGAGAGAGAG TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
189851 GAGAGAGAG TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
189901 ACTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
189951 CTTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190001 AATCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190051 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190101 CTTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190151 GATCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190201 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190251 GATCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190301 AGCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190351 GATCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190401 AGCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190451 AATCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190501 GCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190551 AGCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190601 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190651 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190701 GCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190751 AGCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190801 CTTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190851 AATCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190901 GATCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
190951 AGCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
191001 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
191051 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
191101 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
191151 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
191201 CTTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
191251 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
191301 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
191351 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
191401 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
191451 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
191501 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
191551 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
191601 TCTCTCTCT TCTCTCTCT TCTCTCTCT AATCTCTCT AATCTCTCT
191651 CAGGAGAGAG ACAAAGCTA TCTCTCTCT CCAAGAGAG CAGGAGAG

FIGURE 3, page 54 of 122

191701 GGAATATATTT GTGACGCTGG TOGCGTTTCA CTCGCGTTTA ATTCTCTAG
 191751 CAGTAAATG AAGATAATTA GCGCGCTGG TGGGCTGGTCTG ATCTA
 191801 GGGAGTATT TAAATATTA ATGAAATGAC ATCTGAGGAG GCGTAAAGAA
 191851 TGTAGAGAG ATGCTATAT GTTGGCTTCT GGAATGGTGA GAAATCTAA
 191901 GGTGAAAT GGGGTTCTTA ACATAAGGA GGTAAATAGG ATTTAGAAAT
 191951 ATATTTTTT AAAASAAATC TGTAGATTCT TTTCTTGA AAAATCTA
 192001 TGTATATA TATAATTTCT GATGACATAG GAGTAGAAG AAGATACATA
 192051 CTCTAATAT TATCTTACAG GCGCAAAAT TAAATAAT CTCTTAAATA
 192101 CTATATATTT TCTCTATCTT TATTTCTTGG AADCTGTA GGAATATAT
 192151 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 192201 GTTCTATGAG CAATGCACTT TAAGATAGG TCTCTCTTT AAGGCTAA
 192251 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 192301 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 192351 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 192401 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 192451 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 192501 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 192551 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 192601 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 192651 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 192701 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 192751 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 192801 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 192851 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 192901 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 192951 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193001 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193051 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193101 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193151 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193201 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193251 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193301 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193351 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193401 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193451 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193501 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193551 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193601 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193651 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193701 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193751 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193801 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193851 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193901 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 193951 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194001 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194051 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194101 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194151 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194201 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194251 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194301 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194351 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194401 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194451 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194501 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194551 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194601 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194651 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194701 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194751 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194801 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194851 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194901 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 194951 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 195001 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 195051 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 195101 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 195151 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG
 195201 ACGATATGCA AGTGAAGATA TGTCGAAAG TTCTGTAAT GGGCTTGGG

FIGURE 3, page 55 of 122

199401 CACTTACTAG TCTAGGTTG CAGATAATTT ATTTAGGCTT TTTGTTCTTT
 199451 AATTTCCTTA TCAATAAAT GGGGATCACC TTAAATATG CAACTTATA
 199461 GGGTATTGA AAGATTAA TATCTAAGA GTGTGAGAA STTCTAATA
 199461 TGGGACTGG TTTATTGAA GTTGSTTTT AATTTTGGG ATTAAATGCT
 199491 TCTATGCTT TTTATGAG ATAACCTTGT CACTAGG GTATGCTGCT
 199491 TTAGCTGAA TTTAAATAA ATTCCCATTT AAAATCTGCT TCTTAGTTG
 199491 CACTATTAAT AGTTAAATG CTGAGTAAG ACATCTGCT ATTGCTTGG
 199491 ACATCTGAA CAGATATAT AAGATTTTA CATATCTG GAAATTTTA
 199491 TTTTAACTT TCTTCTGCT ACTCTGCTG CTCACTGCT TTAAGCTGT
 199491 CTTCTGCTT TTTATCTTA GAACTGCTT TCTATCTG TTTATAAAT
 199491 TATCTATTT ATTAACTTA TCTGCTGT CTATCTGCT TTTATAAAT
 199491 ACAAATAAA TTAATAA ACAAACAGA TTTATCTT CACTATTTG
 199491 TGGTCTGAA GCTTACTTG AATTTCTTG CACTAAATT AAAGCTTGG
 199491 CAGGCTGAA TTTCTCTG GAGGCTGAG AGTTAAGTT TTTCTTTTG
 199491 CTTTCTGCT TTTAAAGG CAGCTATAT TCTTCTGCT TATCTTACC
 199491 AAGCTTCTT CATATCTAA ACCAGCAATG TTACTCTAT TGGCTTGG
 199491 TTTATATAT CATTTTCT CTAAGCTAA GCTTCTGAG GCTTCTGCT
 199491 CATCTGCTG TGGGAGCTT CTTCTCTG GATCTAGTA CAGTAACTG
 199491 CTTTCTGCT CAGGAGCTT CAAATAAGG CACTTCTG GCAATTTT GCTATCTTA
 199491 GTAGCTGCT GCAATCTAT CACTTCTG TGGGCTGAA AAGCTTGG AATGCTT
 199491 TTTCTGCTT TTTCTGCT TCTCTGCT TTTCTGCT CATGCTTCT
 199491 ATCTGCTT TTTCTGCT TCTCTGCT TTTCTGCT CATGCTTCT
 199491 TGAATTTCT TTTCTGCT GACTTTGCT AGGCTCTTA TTTCTGCT
 199491 CTTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200001 GCTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200051 TATAGTAAAT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200101 AGGCTGCTT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200151 ACTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200201 TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200251 GCTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200301 CTTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200351 TATAGTAAAT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200401 GCTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200451 GATCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200501 GCTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200551 TCTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200601 AATCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200651 TCTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200701 TCTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200751 CAGTATTTT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200801 AATCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200851 CTTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200901 TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 200951 ATCTGCTT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201001 AATCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201051 GATCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201101 CTTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201151 CTTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201201 TCTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201251 CTTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201301 CTTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201351 CTTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201401 CTTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201451 ATCTGCTT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201501 TATAGTAAAT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201551 GATCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201601 CTTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201651 TCTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201701 AATCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201751 TATAGTAAAT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201801 AATCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201851 TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201901 TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 201951 TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 202001 TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 202051 TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 202101 TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 202151 TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 202201 TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 202251 TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT
 202301 TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT TTTCTGCT

FIGURE 3, page 57 of 122

202351 CATCTGTGGG TTCAGGCTTT TTACTCAATG AGCTTCTAA CAAGTAATT
 202401 TTTCTGATTT TCAAGGGTGA CCAAGTTATA TCTTTTCAG TGAACATTAC
 202451 ATGGCTTAC CTGATTTGTAT ATAGTAAAAA TGAATTTGTT TTCCAGATT
 202501 TTTAATTTA CAAGAACTCT CCAAGCTTCT AGCTTATTT CTGCTTCAAC
 202551 CATGTCTAA TATACCTCTT AGGTACTTAT ATATATTTG ACATCCACT
 202601 GAAATCTAG TCTCTAAGG ATCTATT ATATAAATTT ASGCTCTTCA
 202651 GATACTA CA TGGTACTTCT CTTACTTAAA ATCTAATCT TAGSAAATCT
 202701 CATTGAAAG TACTACTTCA CTATCTTATA TCAATTTAGG GTCTTTCTCT
 202751 GATTAAGAA TCTTCTCAAA ATCTCTAAGA ATCTAATTT CTGATAAATG
 202801 GCTGCTAAT TCAAAATTT AGSAAATTT ATCTTATTT TTGATCTGAA
 202851 GAATCTCTAT CTCTGATTTA AGCTTTTCT CCAATTAAGA TTCTTCTAT
 202901 AATTAATTT AATCTCTCT GAGGAATTTA TTTTCTATT CAATCTGATT
 202951 TGAATCTCT TCTCTCTCT CAAGTTTATT ATCTTATTT CTGACCTCTG
 203001 CTATACCTAG AATGAAAAA CTGCTCAAGA AAAGAACTA AAGGACACA
 203051 AAGCTCTCT CTATCAAAA GTAATCTCT AAAGTCTCAA AGAATTTATA
 203101 CTTCTGATT CTATATGTT TTTTAAATTT TCTCTTAAA TCTTTGTTAC
 203151 CCAATCTTGA CTACTCTGAA TCACTTATA CCACTAGATA TACATATAGC
 203201 ATCTTATAA TACCTTAAAC CTCACTACT CTCTCTATT CTATCTGTTA
 203251 GCTCTAGAGG CAGGCTACTT TCACTACAGC ACATAGTAGG TCTCTTACCA
 203301 GTCTAGAGG CTCTCTATT TTTGCTCTCT TTTGCTCTCT TAAGGCTA CTCTTCTCT
 203351 AATAGAGAG GACAATAATT TTCAAAATATA TATAGGTTA TATGGCTCT
 203401 TTTTAAAAA CTTTCTCTA TCTCTCTCT CCACTAAATA TACAACATGG
 203451 CCACTAGAG CCACTATGTT CTTCTCTCT CCACTAGCT CCACTCTCT
 203501 TTTCTCTAG TCTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 203551 AGCTAGCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 203601 CTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 203651 TCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 203701 CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 203751 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 203801 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 203851 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 203901 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 203951 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204001 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204051 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204101 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204151 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204201 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204251 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204301 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204351 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204401 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204451 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204501 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204551 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204601 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204651 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204701 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204751 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204801 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204851 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204901 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 204951 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205001 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205051 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205101 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205151 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205201 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205251 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205301 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205351 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205401 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205451 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205501 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205551 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205601 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205651 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205701 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205751 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205801 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205851 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205901 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 205951 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT
 206001 TTTCTCTCT CCACTCTCT CCACTCTCT CCACTCTCT CCACTCTCT

FIGURE 3, page 58 of 122

206401 GCAGATAAATG TTCACACGCA AATTGAAAG AGGAATATCT TGTAGTATAG
 206451 AAAATTGTTA AGTTTCAAGT AGGAAATAG CTAAATATA TCATTTTTTA
 206501 GCTTATTAAT AATATGAAGC ATATATAG CTAAATATCT TACATGCATT
 206551 AATTAAATTA TTCTTCATAG CAGATATTA GGAAATAGC ATTGTTACAT
 206601 CCAATTATTA TTTTACGGAC TGAGGATTA AGAATATAG TAATCTGCTC
 206651 AAATTAATAG TTCTTAATTA GGAAATTA TCTTTAAAT TAATCTGCTC
 206701 CTAAATATAG AGAATTAAT CTTCATATCT TCTTTTAAAA
 206751 TAATAATCT TAATACTAG TGTCTTTAG AGAATATCT TGTCTGCTAA
 206801 AGGAATTAAT TTCTTTTAA CTGATCTAG TSAAATTA STAGGAATAT
 206851 TTAATATCT TGAATATCT TGAATTAAG AGAATTAAG TAATTAAGGA
 206901 AGGAATTAAG ATAGGAGGAA GGAAATTAAG AAGGATTAAG TAATTAAGGA
 206951 AAAATTAAGT AAGGAGGAA GGAAATTAAG AAGGATTAAG TAATTAAGGA
 207001 CAGATATAG GGGAATTAAT ATATTAAGT GATATTTCT CAGCTTTGTA
 207051 TTGATTTTAT TAAATAATCT TACCTTTAG GTGACAGAA CTGCGGTCT
 207101 ATGCTTTCT ACTAATCTAG TATATACT ATCTTTCT TACATCTTT
 207151 AATTTCTTA AGCTAAGTT TCTATCTAG TAAATTAAGT AAAATAATCT
 207201 TAAATCTAG TCTATCTAG GCATAGCTA AAGATCTTAT AAAAGTACTG
 207251 TGGAATTTA AAAAATTAAG CAATAGCTA GGGAATTAAG TTACATCTA
 207301 ATATTAAGT AGATGCTTT TAAATCTTA TTTTCTAGT AGAAGGCTCT
 207351 TTSAGAAAGT CAATCTTTG CCGAATTAAG AATAGCTTA ATAGATTAAG
 207401 AGGATTAAGT AGCTATAGT CAGGATTAAG GAAGGATTAAG CTCTCTCTCT
 207451 TTTTCTAGT CTTACCTCT TCTATAGT GTGAAATTAAG CCAAGCTCT
 207501 CTTAGCTCT CTTAGAACT AGCTCTTAAG AAAATTAAGT AATTGAGCT
 207551 AATTTCTTT GAGGAAATCT TGTCTCTCT CTGCTCTCT TTTTCTCTCT
 207601 GAAATTAAGT AAGCTTCTAG AAAATTAAGT TTTTCTCTCT TTTTCTCTCT
 207651 GAGATTTCTA AAAATTAAGT TTTTCTCTCT TTTTCTCTCT TTTTCTCTCT
 207701 TCTTCTCTA CTTTCTCTA CAGGATTAAG CAGGATTAAG ATGCTTCTA
 207751 TTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 207801 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 207851 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 207901 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 207951 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208001 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208051 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208101 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208151 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208201 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208251 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208301 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208351 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208401 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208451 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208501 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208551 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208601 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208651 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208701 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208751 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208801 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208851 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208901 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 208951 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 209001 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 209051 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 209101 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 209151 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 209201 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 209251 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 209301 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 209351 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA
 209401 CTTTCTCTA GAGGATTAAG CTTTCTCTA TTTTCTCTA TTTTCTCTA

FIGURE 3, page 59 of 122

209451 GCAATTATTG TGGGATTTT TGGTGGAC AAAATTGGG GCACCTGAAA
 209501 AGTACTGT TTCTTATTAT TTCTTATTAT CAATATTTTA GAGCTGGTA
 209551 TGTGCAATG TTGATGATG TTGATGATG TTGATGATG TATTGACGG
 209601 GTGACGAGA GAGCTGATG TGAAGGAGG GTGGGATG TGAAGCTGG
 209651 ATCTCTTTT TATTAAAGAA TTGATTA TG GAAAGAAAT GATAAGTTT
 209701 TTCTGATG GAGCTGATG TGAAGGAGG GTGGGATG TGAAGCTGG
 209751 AACAGAAAT ACATGATG AACATGATA GTGATGATG TGAAGCTGG
 209801 GAGGTTATG TGGATTTAA TGAAGGAGG GTGGGATG TGAAGCTGG
 209851 ATGAAAAT GAGCTGATG TGAAGGAGG GTGGGATG TGAAGCTGG
 209901 GAAAGTAAA AACGAAATG TGAAGGAGG GTGGGATG TGAAGCTGG
 209951 GGTATGATG TGGATTTAA TGAAGGAGG GTGGGATG TGAAGCTGG
 210001 GTTATTTT TGGATTTAA TGAAGGAGG GTGGGATG TGAAGCTGG
 210051 GTAAATTT TGGATTTAA TGAAGGAGG GTGGGATG TGAAGCTGG
 210101 AAGAAAGTGT AATAATAAA GTAGGATG GTGAAAGTGT TGAAGCTGG
 210151 AGTGATGAT CATAGAGAG GTGAAAGTGT TGAAGCTGG TGAAGCTGG
 210201 CAAGATGAT CATAGAGAG GTGAAAGTGT TGAAGCTGG TGAAGCTGG
 210251 TAAATTTGAA AGCTGATG CATAGAGAG GTGAAAGTGT TGAAGCTGG
 210301 AACAAAGTGT GTTCTTTAA CAAGAAAGG TTGTAATGG GTAGGAGTGT
 210351 AAGATATTTA GAAAGTGAAT TGAGGAGTGT GAGAGGTTGT GAGAGTGT
 210401 AAGAAAGTGT ATATTATG ATGAAAGTGT GTTCTTTAA GAAAGTGT
 210451 GAGTAAAGT GTTCTTTAA ATGAAAGTGT GTTCTTTAA GAAAGTGT
 210501 TATGATGAT TGAAGGAGG GTGAAAGTGT TGAAGCTGG TGAAGCTGG
 210551 GAGGAGTGT GTTCTTTAA ATGAAAGTGT GTTCTTTAA GAAAGTGT
 210601 AGTGATGAT CATAGAGAG GTGAAAGTGT TGAAGCTGG TGAAGCTGG
 210651 GTTCTTTAA AGCTGATG CATAGAGAG GTGAAAGTGT TGAAGCTGG
 210701 AAGTATTTA GAGGAGTGT AATTAGAGG TGAAGCTGG TGAAGCTGG
 210751 GGAAGTATG GTTCTTTAA GTGAAAGTGT TGAAGCTGG TGAAGCTGG
 210801 GTTCTTTAA GTTCTTTAA GTGAAAGTGT TGAAGCTGG TGAAGCTGG
 210851 GTTCTTTAA GTTCTTTAA GTGAAAGTGT TGAAGCTGG TGAAGCTGG
 210901 GTTCTTTAA GTTCTTTAA GTGAAAGTGT TGAAGCTGG TGAAGCTGG
 210951 CATAGATTTA AGATCAATTT TGAAGGAGG GAGTCTGAG GTTCTTTAA
 211001 AAGTCTGAT GTGAGTGT GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211051 GAGTCTGAG GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211101 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211151 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211201 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211251 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211301 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211351 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211401 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211451 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211501 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211551 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211601 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211651 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211701 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211751 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211801 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211851 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211901 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 211951 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212001 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212051 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212101 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212151 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212201 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212251 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212301 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212351 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212401 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212451 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212501 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212551 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212601 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212651 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212701 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212751 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212801 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212851 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212901 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA
 212951 GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA GTTCTTTAA

FIGURE 3, page 60 of 122

213001 AGGCTGAGGC GGGTGATCA CGAGGTCAGG AGATCTAGAC CATCCTGGCT
 213051 AACACAGTGA AACCCCATCT CTACTAAGAA TACAAAAAAT TAGCCGGGCA
 213101 TGGTASTGGG CGCCTGTAGT CCTAGGAATT CGGGAGCTGA GTAGTTAAGG
 213151 CAGGAGAAATG GGTGGAATG GGAGGCGGAG CTTGCAATGA GCCAAGATGG
 213201 TGNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN
 213251 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN
 213301 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN
 213351 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN
 213401 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN
 213451 NNNNNNNN
 (FC ID NO: 3)

FEATURES:

Start: 2130
 Exon: 2150-2270
 Intron: 2271-5227
 Exon: 5228-5365
 Intron: 5366-158436
 Exon: 158437-158676
 Intron: 158677-161228
 Exon: 161229-162013
 Intron: 162014-167214
 Exon: 167215-167368
 Intron: 167369-185990
 Exon: 185991-186152
 Intron: 186153-188445
 Exon: 188446-188653
 Intron: 188654-197717
 Exon: 197718-197822
 Intron: 197823-209669
 Exon: 209670-209780
 Intron: 209781-210491
 Exon: 210492-210803
 Stop: 210804

SRP81

DNA Position	Major	Minor	Domain	Protein Position	Major	Minor
177	T	C	Beyond ORF(5')			
2155	-	T A	Intron			
2624	C	A	Intron			
3182	C	T	Intron			
3183	G	T	Intron			
4290	-	A	Intron			
4290	C	T	Intron			
6289	G	A	Intron			
6311	T	C	Intron			
7371	G	A	Intron			
9314	G	T	Intron			
9349	T	G	Intron			
10372	C	G	Intron			
10351	G	T	Intron			
10444	G	A	Intron			
10461	G	A	Intron			
10285	C	T	Intron			
10346	C	T	Intron			
10847	A	G	Intron			
10842	G	A	Intron			
14103	A	G	Intron			
14123	T	C	Intron			
14160	A	G	Intron			
14457	-	A	Intron			
14736	A	C	Intron			
14914	C	T	Intron			
16617	A	-	Intron			
16618	A	-	Intron			
17099	T	G	Intron			
18139	T	A	Intron			

FIGURE 3, page 61 of 122

19563	C	T	Intron
19561	C	A	Intron
22662	G	A	Intron
23210	A	G	Intron
24040	G	A	Intron
24536	C	A	Intron
25125	-	A T	Intron
25127	C	T	Intron
25433	T	C	Intron
27143	C	T	Intron
27111	T	G	Intron
27463	G	A	Intron
27453	A	T	Intron
29141	C	G	Intron
30549	C	T	Intron
30884	C	T	Intron
31176	A	T	Intron
31425	T	C	Intron
32128	A	G	Intron
33179	T	C	Intron
33192	G	C	Intron
34114	C	T	Intron
34663	A	G	Intron
34877	A	T	Intron
36025	C	T	Intron
36039	C	G	Intron
36061	G	C	Intron
36415	C	T	Intron
36743	A	G	Intron
36958	T	C	Intron
37577	G	A	Intron
38464	C	T	Intron
38472	C	G	Intron
39509	T	G	Intron
39573	T	C	Intron
39724	G	A	Intron
39862	C	T	Intron
39942	G	A	Intron
39979	C	G	Intron
39990	A	G	Intron
39979	T	C	Intron
39914	A	G	Intron
39949	T	G	Intron
39944	C	T	Intron
40279	A	G	Intron
40666	G	C	Intron
40703	G	C	Intron
41390	C	T	Intron
41260	C	T	Intron
41411	A	G	Intron
42749	C	G	Intron
42769	C	G	Intron
43295	C	T	Intron
44416	A	G	Intron
44565	C	T	Intron
44712	A	G	Intron
45507	C	T	Intron
46163	C	T	Intron
47315	G	T	Intron
47545	C	G	Intron
47941	A	G	Intron
48328	T	A	Intron
48341	G	A	Intron
48453	A	G	Intron
48740	T	C	Intron
49100	T	C	Intron
50548	C	A	Intron
50553	G	A	Intron
54708	G	C	Intron
54958	A	G	Intron
55171	C	T	Intron

FIGURE 3, page 62 of 122

55801	G	A	Intron
56324	A	G	Intron
56557	G	A	Intron
56716	T	G	Intron
58247	C	T	Intron
62313	T	C	Intron
62409	C	A	Intron
62449	A	G	Intron
62490	T	A	Intron
62514	G	A	Intron
63643	T	C	Intron
64911	G	A	Intron
64934	T	C	Intron
65110	T	A	Intron
65143	A	G	Intron
65674	A	T	Intron
65700	C	G	Intron
65810	T	C	Intron
65948	T	C	Intron
65978	G	A	Intron
65988	C	T	Intron
66043	G	T	Intron
66332	C	T	Intron
66361	T	G	Intron
67130	G	A	Intron
67143	T	C	Intron
67541	G	T	Intron
67603	G	A	Intron
67670	T	C	Intron
70338	C	T	Intron
70367	T	C	Intron
71135	G	A	Intron
71101	C	A	Intron
71656	C	T	Intron
72409	C	T	Intron
72144	A	G	Intron
72192	A	G	Intron
72351	A	G	Intron
72362	A	C	Intron
72414	G	T	Intron
72466	G	A	Intron
72929	G	A	Intron
72913	G	-	Intron
73396	C	G	Intron
73961	T	C	Intron
75749	T	C	Intron
77275	C	T	Intron
77282	G	A	Intron
81236	T	C	Intron
82536	C	T	Intron
82954	A	C	Intron
84157	G	C	Intron
85443	T	G	Intron
85674	T	C	Intron
85850	G	A	Intron
85935	T	C	Intron
86535	-	G	Intron
87371	C	G	Intron
87392	G	A	Intron
87423	T	C	Intron
87627	T	C	Intron
87637	G	A	Intron
87777	A	G	Intron
87810	C	T	Intron
89612	G	A	Intron
89137	G	A	Intron
91400	G	A	Intron
91359	A	G	Intron
91555	-	T C	Intron
91641	G	C	Intron
93969	G	C	Intron

FIGURE 3, page 63 of 122

96501	A	G	Intron
96565	T	-	Intron
98444	A	G	Intron
100037	T	C	Intron
100064	A	G	Intron
100073	T	C	Intron
102673	C	T	Intron
102697	T	A	Intron
102734	A	G	Intron
104051	C	T	Intron
107052	-	A	Intron
110039	T	C	Intron
110084	T	C	Intron
115075	C	T	Intron
115086	C	T	Intron
121154	G	A	Intron
121159	T	G	Intron
124473	G	T	Intron
124841	C	T	Intron
124842	A	G	Intron
124844	G	A	Intron
124871	C	T	Intron
130063	T	C	Intron
131139	G	C	Intron
131742	C	G	Intron
133532	A	T	Intron
133601	A	G	Intron
133763	G	T	Intron
133837	A	C	Intron
134033	A	G	Intron
134038	C	-	Intron
134520	G	A	Intron
134746	T	C	Intron
135894	G	T	Intron
136893	G	A	Intron
136945	C	A	Intron
137007	-	T	Intron
137348	G	C	Intron
137427	A	-	Intron
140211	C	T	Intron
140579	G	A	Intron
141441	T	C	Intron
141639	C	A	Intron
141706	A	-	Intron
141707	-	C T	Intron
141709	T	-	Intron
142165	G	T	Intron
142211	G	A	Intron
142605	A	T	Intron
142731	T	C	Intron
145347	G	A	Intron
145433	C	T	Intron
145805	A	- G	Intron
146016	G	A	Intron
147128	G	C	Intron
147363	T	C	Intron
149072	G	A	Intron
149466	G	T	Intron
149483	G	A	Intron
149704	C	A	Intron
151121	G	A	Intron
151384	C	T	Intron
151547	A	C	Intron
151560	C	T	Intron
151584	T	C	Intron
151718	G	A	Intron
151747	C	T	Intron
151708	-	G T	Intron
151771	A	G	Intron
151865	G	A	Intron
151905	C	T	Intron

FIGURE 3, page 64 of 122

159736	C	T	Intron
159737	G	A	Intron
160954	-	T A	Intron
160955	-	A T	Intron
160956	G	T	Intron
161115	C	T	Intron
161116	-	T C	Intron
161219	T	C	Exon
162293	T	C	Intron
162294	C	A	Intron
162295	-	A G	Intron
163447	A	C	Intron
163675	G	A	Intron
165362	C	T	Intron
166011	T	C	Intron
166023	G	A	Intron
167461	G	A	Intron
168235	G	A	Intron
169142	T	G	Intron
169339	G	C	Intron
171315	G	T	Intron
171430	A	G	Intron
171607	G	A	Intron
172220	T	T	Intron
172230	T	C	Intron
174242	C	G	Intron
174476	G	A	Intron
174733	G	A	Intron
174944	A	G	Intron
174979	C	T	Intron
174984	G	C	Intron
174985	A	G	Intron
174991	G	T	Intron
180348	A	C	Intron
180459	A	G	Intron
180786	C	T	Intron
181119	A	G	Intron
181213	C	T	Intron
181226	-	T	Intron
181231	C	T	Intron
181272	C	T	Intron
185026	A	G	Intron
185822	A	-	Intron
187037	C	T	Intron
187351	T	-	Intron
187366	C	T	Intron
187392	A	G	Intron
188074	C	T	Intron
188086	A	G	Intron
188083	G	A	Intron
188222	C	T	Intron
188224	T	C	Intron
188499	G	A	Intron
188549	T	C	Intron
188721	A	G	Intron
188811	T	C	Intron
188849	T	A	Intron
188143	C	T	Intron
188418	C	T	Intron
188516	C	A	Intron
188517	A	G	Intron
188514	C	G	Intron
188510	T	G	Intron
188519	A	G	Intron
188526	A	G T	Intron
188525	T	C	Intron
188530	C	T	Intron
188509	G	C	Intron
188514	C	T	Intron
188809	A	G	Intron
203159	G	C	Intron

177 I I

FIGURE 3, page 65 of 122

FIGURE 3, page 67 of 122

[illegible]

T T A G A A T A A G C C T C T G C A G A A A T T C T A T A G C A A I T A T A T G G G A A T T A C A C T T T A A G A A T
C C T T T T T A A A T T A A A A A G T C T T C C A T C C C T T T A G T A A G C A T T T T T G A G C C C T T A A C C C A A A G
C T A G G A A T A C A T A A A T T C T C T A C A A A T G C A G A C A A T A G A A G T T C A T T C C C C A C C C T G G
A A T A C T T T A T C T A T A G T A A G A C A T T T T C T A T C T G T A A A G A G A A A A T T A A A A T G T A A T G T
T G T A A G T C T A T A T A G C A A A T T T G T A T G G A G T A T T G A A G A T T C C T T G A A G A G T G G A G T T T
[1,6]
T T T T A G G A G C T G C T G A T T G A A T T C A G C C T C A A C G A T A A A T A G A T T A T C T A T C T G C A A
A G G G T T A G T A A A T A T A G C A T C C C A C A G G C A G T T C T A G T A C A A G A C T G A G T T T C T G G C C
C A T A T A C T T G T G T A A G A A C C A T G G A A T T T C A C A T T A G A A T T G G A C A T C T T C T T G T A G A T
A A T A T T T T A A A A T T A A A A T C T G G C A A C A C T A G G G C T G G A C T A T T G C A G C C T C A A T
T A T T G A A T T G G A C A A A G A A A C C C A C T C A A A G C C T C T T T C C A T A A G T C A A T T C

TTTCTTCAAGCTACACAATGCTTTTTCATATTTGGCATAAAAATTCAGATTTCTGGCAGCT
TTAAAAAAAAGAGCTTAGGCGATTTAAGCAACCCCTAGGCGCCAGATTCCTGCTTAACTTCTAT
TTTCTAGAGCTGAGAACTGCTGGCCCTTTTAAATACATAAATTCGAGTTAACCAAAGT
TTTCAATACCTTCTGTTTGGATTGCTAGAGTAATCAATATCTGTTTGGGAGGCGCT
AAGTACCTCAATCTCACTCACTCACTCACTCACTCACTCACTCACTCACTCACTCACTCACT
(C, 4)
TTTCAATAATATCTATTACTTACCTGTGCAAAAATAATAAAGGACACAAAAGATGTATAA
CTCTACTCTTCAAAAAAGTAGTGTGTATACAGTAATGAGAGAGAAATGGTGGCTGATGGT
GGATATAAAGAAGATTTTGAAGAGCCCTACTATTCTGCAAAATACTTGGAGGCTGTCT
CAAGTTTATAAATCTGTCTGAAAGAGCTGATTATCCCAATTTCATTGATGATGCTACTGAGA
CTGAGAGAGATCTGTGCTCTCTTTATAATTATGCAACAAATAAAAGCTAAAGTAGATTTA

CATTAAGCAATCTAGAGCCACATCTCTGCTTAACTTCTATTTCTAGAGCTGCAAACTG
 CTGGCTTTTCTAAATACTATAAACTGCCAAGTTAACTCAAGTCTGCATTAATCTCTCTTTG
 ATCTGTATAGTAATCAATTTATGTTGTTTGGGCAAGCTTCAAGTAGGCAATTTATCTCA
 TATCTCAATTTATCTGCTCAGCATTTATCATTTTATTATTTGTTCTAATAATATCTATTA
 CTGATCTGTTTAAATATAATAAAAGACAAAAAGATCTCAAACTCTATCTCTCAAAATAA
 AATTT
 TAGTCTGATACAGTAATGAAGAGAATGGTGGCTGATGCTGTGGATAAAACAAGATTATTT
 TGAAGAGCTATCTATCTGCAAAATACITTTGAGAGTGTGTTGCTCAAGTTTATAACTGCTCT
 GAAAGCTGCAATATCTCTATTTCTATTGATGATGATCTGATCTGATCTGATGATGATGATGAT
 CTCTATATTTATCAACAATAAAAGCTAAGCTAGTATTTAAAGCCAGTTTGGGGGGCTC
 TAAAGCTAATAGCATCTCTCTTTTAAAGATCTATGAATATGGCCAGGCTAGTGGCTC

A TAAAATTTC ATTACTTCTGTTTGATTGTTACAGTAATCAAATATGTTGTTTGGC
AGCTGTGTAAGTAGGCCAACTACTCATACCTGATTTATATGTCAGCATTCATCATTT
ATTATTTGTTTAAATAATCTATTACTTACCCTGTCAAAAATAATAAAAGACACAAAA
GATGATAACTCTACTCTCAAAAAAAGTAGTGTGTATACAGTAATGAAGAGAATGTGT
CTATCTGTCGGATAAACACCAATTAITTTGAAGACTTCTATGTGCCAAATACTTTGAG
(348)
TATTCTTTAACTTTTATAACTGTCTTCGAAGGTGATTATCTTCATTTCAATGATGG
TACTTGAATAGAGAGATTTGTGTTCTTTATATATGACCAACAAATAAANAATCAAGCT
ATATATTTAAAGACGATTTTGGGGCTCCAAAATCTCTTGAACATCTCTTTTAAAGATC
TAGCAATCTGTAATGAGGTGATGCTGACATCTGTAATGATATATTTTGAAGGCTGAG
CTGGATGATATGAGACTCAAGAGATTGACACCATCTCTTAAATACAGTGAAGACCAT

TTTGTATCTGTAAGTAATTAATAATATTGTTCTTTGGGCAAGGCTTAAGTATGGCAATCTA
CAGATAATGATTTTATATGTCAGCAATTCATCATTTTTATTATTTTGTCTAATAATATCT
ATTATTAATCTTTCACAAAATAATAAAAGACACAAAAGATGTATAAGTCTCTATCTAAA
AATAATATCTGTATATACAATAATGAAGAGAAATGGTGGTGGATGGTGGATAAACAGAAAT
TATTTTAAAGACTATATGGTCAAAATATTTTGAAGGCTTGGTTTAAAGCTTTTATAACT
CTGAT

CTTTGAAGAGCTGATTATGCGCATTTTCATTGATGATGGTGAAGCTGAGAGAGATTTGTG
TCTTCTTATCTTATCTCAAGCAAAATAAAAAATTAACTGATATCTTAAAGCAAGTTTGGG
GATCTAAAAGCTCAATGAGTATCTCTCTTTTAAAGACTATGATATCTGCTGAGGCGAGT
TCTCAATCTTGAATCTGAGTCTTTTGGAAAGCTGAGGTTGGGAGATCATGAGTCTGAGGA
GATTGACACCATCTGGCTAATACATGAAACCCCATCTCTACTAAAAATACAAAACCTT

CCGCATTTCATTGATGATGGTACTSAGATTGAGAGABATFSTGTCTTTCTTTATATTATGCA
AAGAAATAAAAAACCTAACTAGTATTTTAAAGCCATTTCAGGGCTTCAAAACTCAATGAG
GCATTTCCTTTTAAAGATCTATGAATATGGGTAAGGAGATGGCTACACTTTGTAATC
CAACAATTGGGAAGGCTAAGCTGGGCAATCATGAGGTCAGGAGATTCACACCATCTCTGG
CTAACTAGCTGAAATCTAATCTTAATAAAATACAAAAATTAAGCTGGGCTGGTGGTA
(C,T)
GCAATGCTAGTCCATTAATCTAGAGGCTGAGCAAGAAATTCCTTGAATCTCAGGAG
CAACAATTGGATTCAGCAAGATACGGCACTGTAATCAAGTGGAGACAGGAGAGAA
TTTCTTCAAAAAAGAAAAAAGAAAAAATCTTAATAATGGACAGAGAAAA
GTATATACTATTAATAGCTACAGGCTAGAACTGTAAGTGGATTTATGATTCAAG
CTAAGAGCTAAGCTTCAGAGAGAGAGCTATTAATCTTAATGATAGAACTTCTTGG

ATCAAAATAAAAAATATAAGCTTASTATTTTAAAGCCAGTTTGGGGCTGCAAAAATCAATGAG
 CATTCTTTTTTAAACATATATGAATATGGCCAGCGGCGAGTGGCTACACTTGTAAATCC
 AGTATTTTGAAGGCGGAGGTGGCCAGATCATGAGGTAGGAGATTGACACCATCTGGG
 TAATAGCATGAAATCCATTTTATGATAAAATACAAAAACTTAGCTGGGGCTGGTGGGAG
 GATATGTATTTCCAGCTACTTACGAGGGCTGAGGCAAGSAGAAATTCCTTGAATCTAGGAGG
 (30.1)
 AAGGTTTATTGAGGCAAGATCAGCCACTGCACTCTAAGCTTGGCAACAGAGCGAGAAT
 TTCTCTTAAAAAATAAAAAAATAAAAAAATCTATGAATGATATGGCAGAGAAAAAG
 TATATATAGCTCAAAATAGCCAAAGCTAGAGGATTAAGTGGAAATTATGATTCAGGC
 TTAAGAGCTTAACTTTTAAGGCAAGAGATTAAGTGTGATTAATGATGAAAACTTTTGGGG
 AAGCTGAACTTTAGCAAGCACTAAAGGGTGGAGCAATTTGGTTTGGGAGTGGGAGAA

CAAAATAAAGACTTAAGCTAGCTATTTTAAAGCCAGATTTCCTGGGCTTAAAAATCCAATGAGG
ATTCTCTTTTTTAAAGATCTATGAATATGGCCAGGGGCACTGGCTACACTTGTGAATCCCA
GCACTTTTGGAGCGCCGAGGCTGGGAGATCATGAGGTGAGGAGATTGACACCATCTGTGGT
AATACTGTAAGAGCTATCTCTACTAAAAATACAAAAACTTAGCTGGGCTGCTGGCATG
CACTCTAGTCCAGCTACTTAGGAGGCTGAGGCAGGAGAAATTGCTTGAATCAGGAGGC
(A, 1)
GAGGTCTATGAGGCCAAGATCAGGCCACTGCACTTCAAGCTGGCAACAGAGCGAGAATT
TGTCTCAAAAAAAGAAAAAAGAAAAAAGAAAAAAGTATGAATATATGACAGAGAAAAGT
ACTATAGCACTGAAATAGCGCTAAGCGTAGAAGTGTCACTGGAATTATGATTCAAGT
TAGAGCTTACGCTCTCAAGCGAGAAGCTATCACTCTGATCATGAAAATCTTTGGGGA
AGGTCGAATTTAGAGCATTAAGGCTTGAAGCGATTTGGTTCTGAGTGGCAGGAG

ATGA GTTCTTACTCTTAGCTTCCCATCAGAGTCTCCATCAGAGTATAGTCTTCAGTGGT
ATTA CATGAATGAAGAATAATATGGAGTGCACAAGAATAAGCTGCAATCATTCCTGTTA
GCTATCTCTTTTTCATATATATGAGCTTTTACAGAGTTTCAAAGCTCTGCTGCAAACTAT
ATGATGCTTATTAATCTTATAGCTCTCAAAGTTATGGGGTGAAGAAATCAGGTTAACTTA
ATGGAAGATGATTTTACGTTCTCTGGAGCTATTGCTATGAGAGGCTCTAAATACAGGAT
(15.6)
AGGTTCTATCTTTTAATAAAGAATTTCTGATTAAAGCTCTGGGTTGCCATTGATGTAT
GAGCTCTCTATCTATCTTACAGCTTTTGGTGTGTCTAGCTCTCTCCAGAAGACAGG
GCAATCTACAGGCTATGAGAGTTACAGGTTGAGGAGGAGAGCAAAACTGGGGCAAAATGAGG
CACTTGCAGCTTAATCAAAATGATACCTATGGTATAGCTCTCTTCCATGCTGTTCTATCT
TTGAAATCTTAGGATGAAAAATAAAGTTTGAGAAATAGCTTACGTTTGTCTATAAAAGTA

CCGCTGGAGCTATTCTTATGAGGGGGTGCATAATAAGGTATAAGGTTCCATTTCTTAATAAA
AGGATTTCTGACTTAAGGCGCTGGGGTTTGGCATTGATGATGATGAGGCTGTGTAIGCATCTTAG
GACTTTGGGCTGTCTTACAGGCTGGTGGCCAGAAAGTACAGGCGGAGTCTCAGGGGCCATGGGAG
GTTCAGCTTGTAGGAGGGGAGGCAAAAGCTGGGGCAAAATGAGGAGTTTGGAGGCTAATGAAT
TGATATCTATGGTTAGGGCTGTTCATAGTGTTTCAATTCTTGGAAAGCTATAGGATGAAA
(13/31)
TAGAGTTTACAAATAGGCTTTAGTTTGTCTCAAAAATTAATATATACATTACAGAAAGCT
ATAGGAAATAGAGAGAGCAAAATCAATAAAAAGTTGTATAATATAGATACAGGAGTAAGCT
TTCTATTTCTTTTGAAGCTCAAAATTTTAAAGCAATACAGATTATCTTACTGTTCTATA
ATAGATTCTTTGTATATACAAAGCTATAGGCTAATTTTATTATTGACATTCAATTCTTA
ATCTTTTATAAAAAAGCAATACATATGTACCTTAATTTATTTAAGCTGTCTGCTTTT

CTTAAATTAATATATAAGGTTTCATTTTCTAAATAAAGAATTTCTATTTCAGGCTGTGGT
 TCTTACAGCAATATATACCTTTGTATGTCATCTTAATCACTTTGGTGTGTCTCCAGGCTGTG
 TCTAATAAGGATATAGAGAGCTTAGGGCCATGGGAGCTCTCACTTTCAGAGGGTAGGCAAAA
 CTCTCTCAAAATAGCAATATTCAGAGCTCAATGAAATTCAGAGCTATGCTTAGGGCTTTT
 CATTCTTTCATCTCTGGAAAGCTTTAGGATCAAAATAAGCTTTAGAGATACTCTTAGT
 TCTCTT
 CTTCTAATAAACTAATATATATATTACAGAAAGCTATACCAACAGACAGTAAATACAA
 TAAATATTCTATATATATACTACTAAGGATACATTTCTAGCTTTTTTTGAAGCTATAGAA
 TTTTAAACATTAATATTTATCTTCTCTATATACTATTTTGTGCATATTATCAATC
 TTTATCTACTATTTTATTGTCACATTCATTTTTTAATCTTTTCATAAAAGCCGACTGTAC

ATATGTACCTAATTTATTTAAGCTGTCTCTTTTATGGATATCTAGTTTATTTCCCTT

15560 TCAATCCAGCAATGGCAGCTTTCAGCTTCCAGCTACAACTCCAGTGGAAAGGAAAT
TCTTTTCTTATAGTTTCAAAAGCTTGGGCTGATCTTATGGATAAAAGTTAGS
ACAATGCTTATTTCTGAATATGAACAGTGGCCAGGATATGTAATCTTTTGGCTTACA
TGGCTTATTAATTCATCTTTTAAAGCTTGGGCTAGTGAAGAAAGCAAAAGATTGT
GGATTGAAGCAAGCCAGCAAAATATATGGACATGGGGAGGAATAATTTCTTCAAGG
(A, G)
AATAGCATGCTATTTAAGCAAAAGSAGTGGATTTAATGCTTGGAGGCAAAATAGATATA
TATATATATTTTGTCTATTAASATATATATATAATACATCTATATATAGATGTAAA
TGGATTTATTTTATTTTATGATTTATTTAAATAAATAATTTACTTCTCTATATA
TATATCTATATATATATATATATATTTTAAATTTCAATTTTTCAGAAAGAAATTTAG
ATAAGCTGSAATGGAGCAATAGAGCAAAAGTCAATCTTAAAGTCAGAAAGCTAG

15567 GATGTCTATGGATAAAACTTAAAGATGCTTATTTCTGAATATGACACAGTGGCTAGG
ATATGTAGTCTTTTGTCTGACATGGGCTAGTGAATATCATTTTATAGAGCTTGGGT
AGTGAAGAAAGCAAAAGATTGTGATTTAAGCCAGTCCAGCAAAAGCATAGGATATGG
GGAGCAATAATTTCCCTCAAAAGGCAATCAGGATCTATTAGCAAAAGAAATGGAGATTGA
TCTTGGAGAGCAAAATAGATATATATATATTTTGTCTATTAAGCATATATATATAT
(-, A)
CACTATCTATATATAGATTAATGTATTTATTTCTATTTTATGTATTTATTTGAAATA
AATAGATTTCTCTCTATATATATATTTATCTATATATAGATGTGCCCCATTGCAFA
TCTTTTCAGAAAGAAATTTAGACAGGCTGAGCTGAACCAATTCAGACAAAAAGTCAA
CATGCTTAAGCTCAGAAAGCTTAAATGAGATAAGCAATACAAAGGATTCTGTGGTA
AGTCAAGATTAAGTCAAGCAAGGCAAAAGCTTCAAAATTCAGGCTTCTGACTTAATCA

15736 GATATGGGCTAGTGAATCATCTTTTATAGAGCTTGGGCTAGTGAAGAAAGCAAAAG
TTGTGATTTAAGCCAGGCAAAAGCATACGGATATGGGGAGGAAATTTCTCTCA
AAGGGCAATCAGGATGCTATTATTAAGAAATGGAGATTGAATGCTTGGAGGCAAAATAG
ATATATATATATATTTTGTCTATTAAGCATATATATATATACATCTATATATAGAT
GTAAATGTATTTATTTCTATTTATATGATTTATTTGTAATAAATACATTTACTCTCT
(A, C)
TATATATATTTCTATCTATATATATATATTTTCCCATTTGCACATCTTTTCAGAAAGAAAT
TCAGACAGGCTGGAGTGAAGCAATTCAGACAAAGTCAACATCTTAAAGTCAGAAAG
CCAGCAATGAGACAAAGCATACAAAGGATTTCTGGTGGGTAAGTCAAGATCAGAAAGTCA
GACAGTAAAGGCTGAAATTCAGGCTTCTGAGTAAATCAAGCTGTAGGGTCTTTGG
TAATCTTGTCTAGGCAAGCAAGCAAAAGCTTCTTCAAGAAAGTTAGAAAGTGTATACCA

15914 AATATATATATATATTTTCTCTATTAAGCATATATATATATACATCTATATATAG
ATGTAATTTATTTATTTCTATTTTATTTATTTATTTGTAATAAATACATTTACTCTCT
CTATATATATATTTCTATCTATATATAGATTTCCCATTTGCACATCTTTTCAGAAAGAA
AATTAGATAGGCTGAGCTGAAGTAAATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT
GAGCTAAGCAATGAGACAAAGTACATACAAAGGATTTGGTGGGTAAGTCAAGATCAGAA
(C, T)
AGGACAGGCAAAAGCTGTGAATTTCAAGCTTTTGAATTAATCAAGCTGTAGGGTCTTT
CTAATCTCTTGTCCAGGCAAGCAAAAGCTTGTGTCACAGAACAGTTAGAAAGTGTAGC
TATTCAGCAATATAGAAAGCAATGGAGCTTGTCTCTCTAGGCACTGTGATAAATAGTT
GAGGTCTGTGGCTGTAAATTTTGGTGTATCTGAGGCAAGCAATCTCTGTCTCTCTCT
TAGGATATTTCTGTCT

16657 ATGAAGGAGGTTTAACTTTTAAAGCAAGCAGAGATCTCAAGCTGGCTCTCTCTCTCTCT
GCAACAGGCTAGTATGCT
AAGATTAACACTGATGAGGCAAGCAAGCTTAATGATTGAAAGTGGTTAGCTACAAAGG
TCAATGATTTGGGGAGGCTGACTTCTTTATTAATAATTTATATTTGTGGAGCATGG
TGGTACATGAGATTATTTTGGCAATTTATTTCTCTCTCTCTCTCTCTCTCTCTCTCTCT
(A, -)
ATATAACTTCTGCTTATTAATGTCAATTTGGTCTATTTGATGCTCTGSCAAATTAG
ATATTAGTACATAAGTTTAAAGCAGATTTATGAGAAGCAATGCTCCAGAGAGCTGCT
CT
TCT
ATGCTTAAGTTTATATACCAATGAATTTGAAATGCTTCTCTCTCTCTCTCTCTCTCTCTCT

16658 TGAAGGAGGTTTAACTTTTAAAGCAAGCAGAGATCTCAAGCTGGCTCTCTCTCTCTCT
GCAACAGGCTAGTATGCT
AAGATTAACACTGATGAGGCAAGCAAGCTTAATGATTGAAAGTGGTTAGCTACAAAGG
TCAATGATTTGGGGAGGCTGACTTCTTTATTAATAATTTATATTTGTGGAGCATGG
TGGTACATGAGATTATTTTGGCAATTTATTTCTCTCTCTCTCTCTCTCTCTCTCTCTCT
(A, -)
ATATAACTTCTGCTTATTAATGTCAATTTGGTCTATTTGATGCTCTGSCAAATTAG
ATATTAGTACATAAGTTTAAAGCAGATTTATGAGAAGCAATGCTCCAGAGAGCTGCT
CT
TCT
ATGCTTAAGTTTATATACCAATGAATTTGAAATGCTTCTCTCTCTCTCTCTCTCTCTCTCT

FIGURE 3, page 70 of 122

ACTRAAGTTT TAAGCAAGGTATCTTACCTGACCTGAAAAATCTGTGAGCATTGTAGGAAA
TGTCTAATGTATATATCACTGAAGTTGAAAAATCTTTTCTTTTGCAGCAATAGCTGGCA

17099

ACGCTAATAAATAATGCTGCTAGT TAAGCAAGTTTACAGACTAAAGTTTGAAGCAATC
TATCTGAGCTGAATGAAAAATCTTACAGCACTTAAGAAAGCTCAATGTTATATATCAG
TGAATCTGAAATCTTCTGTTTCTGAGCAATCTGAGCAATAGAGCAACCAAGCTGCT
TCTTACAGCTTCTGAGCACTGAGCAAGCTTGAAGCTTGAAGCTGAGCAATAGCTGCT
ATGAGCAATCTTCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
[1,4]
AGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
AATCTGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT

18139

TAGAAAGCACTCTGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
AAGCTGATAGAGCTGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GCTTAAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
AATCTGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT

19303

ATTTATTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GCTTAAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GCTTAAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
TACTTAAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
TCTTAAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
[1,4]
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
AATCTGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT

19501

AATGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
TACTTAAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
ATGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCAATGAGCAATCTGAGCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAAT

22852

GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT

23210

CTTCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT
GAGCTGAGCAATCTTCTGAGCAAGCTGAGCAATGAGCAATGAGCAATGAGCAATGAGCAAT

FIGURE 3, page 71 of 122

ATAAATTATTTTATTTTCAACATATAACGTCAATSTCAAAAATAAGAAAGAGCAAGTTT
 CATAGGAGAGTTTGAAGAGAGATCTTGAAGATTAGTSTAGAGGTTCAAGATAGAGGA
 GGAAAGTTTCTTCTGAGGAGAGCAAAATTAATTTTCTGAGAGGCTTAACTGAG

24040 ATTTGGAAAGTTACTTATTTTATGTTTCAAGAGGCAAAACATAGCAAAAGTGAATA
 CAAATATTTCTGAGTTTGAAGTTTGAATTCACACAGAGAGAGAGTTTAAATTTTGAAG
 TGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 GTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTT
 CTGTGATAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 [G,A]
 TTGAATAGCAAGAGCAAAATTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 ATTGAATTTGTTTCTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 TGGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CAGCAGAAATTTGTTTCTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 AGCAGAGAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG

24536 TCTTTCTCTTTTCTTCTGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 GGGGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 TGGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 AATGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 [G,A]
 ATTTGGAGAGAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 GGGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 TGGCAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CAGCAGAGAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CAGCAGAGAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 GGGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG

25125 GTCACTGAGAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CTGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 GAGCAGAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CATTAAATTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 [-,A,T]
 GTTTCAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 AGAGGAGAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 AAGCAGAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 AAGCAGAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CAAATTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG

25167 GAGAGAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CTGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CTGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 TGGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 AAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 AAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 [G,T]
 CTATGAGAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 AGGCTTATTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CTGAGAGAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 TAGAGAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 TTAGGTTGAGAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG

25623 TGGCTATGCTGCTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 AAGGTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 AAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 [T,C]
 ATTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 TTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 TTGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 GTTATTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CTATGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG

27143 GAGAGAGAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 TTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 CAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG
 [G,T]
 GGTGTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAGTTTGAAG

FIGURE 3, page 72 of 122

34668

34807

36025

36058

36061

36418

FIGURE 3, page 75 of 122

AATCCAGTCCCATATGCTCTGTGATG TGAATATAATCTTGAGAACACAATCTTGAAGT
 CCGAATGCTGGAATAGTGAATGCGAAAAATTCAGAAATCTGTAAGT TAAAAATTTGAAA
 [7, 2]
 AGTAAATCTCTGAAAAACATTAATTTGAAAAATTAATAATTTGAAATCTTGAAATCTTGC
 AAAAGAAAAGCTCTGGGAAAGGATTAATCTATCTTTGCTTGTATAGGATAGTCTGATCG
 TGTCTATTACATCATATTAAGAGAACTTTATCTCTTATCTTTATTTGAAATTA
 ATTATGCTTTAAAGAGATGATATTTGGGCTACAAAGGCGAGACATTTGGGCTTAATTT
 TATCTGTAAGCTGAGATTAAAGAAATTAAGAACTGCTGTAAGAAATTAATCTTTGCT

38573 AGAGAGAGATAGCACTTGGTGGCTG TGAAGGCTTTCTTTATTCATTTAAATTTATTC
 CAGTAICTCTTAGTGTCTAAATAGTGAATCTTGAATAGGCTCTCTGAAATTTAATTC
 CAGTCTCAGATCTCTTCTGATGCTGATATAATCTTGAGAGATCAATCTTGAAATCTCG
 AATCTTGAATCTGAAATCTGAAAAATTTGAAATCTCTGAAATCTGAAATTTGAAATAG
 TAAATTTCTGAAAAACATTTTGAAGATTAAGAAATTTGAAATCTTGAATCTTGAAG
 [1, 2]
 CAAATCTTGGGGAAGGAGATTAGTGTATTTTCTGTTGACACAGGATAGGCTGATCTGCT
 AGTTAATCTATATTAGGCTGAAGCTTTATCTCTGTTATTTCTCTCATTTGGAATTTAATTA
 TGGTTTAAAGGAGATGATATTGGAGTGAAGAGGGGACACATCTGGGCTTAATTTTAGG
 TGTACATTTGAGCTGGATTAAAGGAATATCTAAAACTGCTGTAAGACATTACTTTTGGTGT
 CTCTGAGTGTCTTTCTGAGAGGAGTGTATGATTAAGTGGATTAGGCGGGGAAGATCTGGC

38624 AATTAATCTGAGTATCTCTTAAGCTGTAAGTGAATCTGCTGACATGGAGGCTCTTGA
 AATTTAATCTGAGTATCTCTTAAGCTGTAAGTGAATCTGCTGACATGGAGGCTCTTGA
 GAACTCTGAAATCTTGAATCTGAAATCTGAAATCTGAAATCTGAAATCTGAAATCT
 TGAAGAGTAAATCTCTGAAATCTGAAATCTGAAATCTGAAATCTGAAATCTGAAATCT
 TCTTGAAGTAAATCTGAAATCTGAAATCTGAAATCTGAAATCTGAAATCTGAAATCT
 [1, 2]
 CATCTCTGTTAGTTAGTATCATATTTAGGAGAGATCTTATCTGTTATTTCTTTATTTGA
 AATTAATTTATCTTTAAGGAGATGATATTGAGCTGAAGAGGGGACACATCTGGGCTT
 AATTTAGCTGTATCTTGAATCTGATTAAGGAGATCTGAAATCTGAAATCTGAAATCT
 TCTGCTGTCTGTGTAGTGTCTTTGAGAGGATGTGTGTATCTAAGTGGATTAGGCGGG
 AGATCTGCTCTAGT

38802 TTTCTAATAGCTAAATCTCTGAAAAACATTTTGAAGATTAAGAAATTTGAAATCTTGA
 AATCTTGAAGTAAATCTCTGAAAAACATTTTGAAGATTAAGAAATTTGAAATCTTGA
 CTGATCTGTGTTAGTTAGTATCATATTTAGGAGAGATCTTATCTGTTATTTCTTTATTTGA
 GAAATTTAATTTATCTTTAAGGAGATGATATTGAGCTGAAGAGGGGACACATCTGGGCTT
 AATTTAGCTGTATCTTGAATCTGATTAAGGAGATCTGAAATCTGAAATCTGAAATCT
 CTTAATTTAGTGTGTAGT
 [1, 2]
 TTTCTAATAGCTAAATCTCTGAAAAACATTTTGAAGATTAAGAAATTTGAAATCTTGA
 AATCTTGAAGTAAATCTCTGAAAAACATTTTGAAGATTAAGAAATTTGAAATCTTGA
 AATCTTGAAGTAAATCTCTGAAAAACATTTTGAAGATTAAGAAATTTGAAATCTTGA
 CATCTGATCTGTGTTAGTTAGTATCATATTTAGGAGAGATCTTATCTGTTATTTCTTTATTTGA
 TCTGTATCTGAAATCTGAAATCTTCTTAAAGTAAATCTGAGATCTGTTCTGTATATCT

38842 ATTAAAGATTTGAATCTTGAAGTCTGAAATCTGAAATCTGAAATCTGAAATCTGAAATCT
 TTTGCTTTGAAGAGGATAGGCTGATCTGTTAGTTAGTATCATATTTAGGAGAGATCTTGA
 TCTGTTATTTCTCTTTATTTGAAATTAATTAAGTCTTGAAGGAGATGATATTTGAGGCTG
 AAGAGGAGAGATCTGAGGCTTAATTTTGAAGTATGATCTGATCTGATTAAGGAGATCT
 TAAAGCTCTGTAAGATTAATTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT
 [1, 2]
 AGCTTAAAGTGTAGGCTGAGGAGATTTGCTCTTGAAGGCTGAGGAGGCTTGAATCTG
 TGAAGGCTGAGGAGGAGAGATTAAGAGGCTAAATTTGCTCTCTGAGGAGCTGCTGCTG
 TTTCTCTTACTGCTGCTGATTAAGAAATCTGAAAGGCTGATTTTGAATCTTGA
 CTCTCTCTGATAGGATGATCTGATTAAGAGGCTGAAAGGCTTCTTAAATTAATTTAG
 AGATCTCTTTCTGATATCTCTGCTGAGAAATCTGAAATCTGATCTGATCTGATCTGATCTG

39029 GAAAGATCTGAGGCTTAATTTTGAAGTCTGAAATCTGAAATCTGAAATCTGAAATCT
 TTTGCTTTGAAGAGGATAGGCTGATCTGTTAGTTAGTATCATATTTAGGAGAGATCTTGA
 TCTGTTATTTCTCTTTATTTGAAATTAATTAAGTCTTGAAGGAGATGATATTTGAGGCTG
 AAGAGGAGAGATCTGAGGCTTAATTTTGAAGTATGATCTGATCTGATTAAGGAGATCT
 TAAAGCTCTGTAAGATTAATTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT
 [1, 2]
 GATAAGATTAATTTGCTGATTAAGAGGCTTGAAGGCTTGAAGGCTTGAAGGCTTGAAGGCT
 TTTGCTTTGAAGAGGATAGGCTGATCTGTTAGTTAGTATCATATTTAGGAGAGATCTTGA
 TCTGTTATTTCTCTTTATTTGAAATTAATTAAGTCTTGAAGGAGATGATATTTGAGGCTG
 CTCTCTCTGATAGGATGATCTGATTAAGAGGCTGAAAGGCTTCTTAAATTAATTTAG
 TATTATATATCTTTGAAGTCTGAAATCTGAAATCTGAAATCTGAAATCTGAAATCTGAAATCT

39040 GGGTTAAATTTAGGCTGATCTGATTAAGGAGATCTGAAAGCTTGAAGGCTTGAAGGCT
 TACTTTTGT

FIGURE 3, page 77 of 122

[A, 5]

ATTN:

39179

 $\{T, \cdot\}$

TTGT

39424

13.9

TCT

39459

11

AGT

39594

10

1000
 1000

40279

13

GI

40666

GTCTTTTATTCTAGTCACTTCTGCTTCCACAATAAGAGGCTATCTGTCTTTGGTTTCAGGG
GGTGAATTAATCTTTATATTGCTGATAGGGCTSTCCCTTGAAGTATCTTTTCTCAA
TGATAGTCTTTAGAGGGGGGAGAGTCAAGAACTTAAGCTAACTAATGATTATCTTT
TCAACAATTAAGTACTAGAGGAGTTCAGATCTGCTGCTTCTGCTTAAAGGGAATCAGATTC

[3,7]
ATCTTTGGTCAAGAACACATCTTAAGCTCTGAGTTCAGGCTTTATGAGTCACTCTTCA
ATCTTTATGAGGCTCAATCTAGTCTTAAATACTTGGTCAAAATCTGAGTTCAGGCTTAA
AACTTATCAAGGCTCTGAGTAACTTCTGCTTCACTCACTTCAATCTATCTATCA
GCATCTTAAATCTTCTGAGATCTGCTTTGATCAACAGATAAGCAAATATCACTTAACT
CTAAAGTTGAGGCTAACTTAACTTCAATCAAGTCAAGTCAAGTCAAGTCAAGTCAAGT

40723 GGTCTCTTTATTCTAGTCACTTCTGCTTCCACAATAAGAGGCTATCTGTCTTTGGTTTCAGGG
GGTGAATTAATCTTTATATTGCTGATAGGGCTSTCCCTTGAAGTATCTTTTCTCAA
TGATAGTCTTTAGAGGGGGGAGAGTCAAGAACTTAAGCTAACTAATGATTATCTTT
TCAACAATTAAGTACTAGAGGAGTTCAGATCTGCTGCTTCTGCTTAAAGGGAATCAG

[6,1]
TCAATCTCTATGGGAGCTTCAAGGCTCTCAAACTTCTGCTCAAAAGGCTGAGTTGAACT
TAAAGCACTAGGAGGCTCTGGAGCTATAGGTTGGTCTCTATCAGATGAGTATCTATGA
TGAATCTATCAAACTCTCTGAGATCTGCTTTTATGAGACAGATAAGGAGGAACTAAG
AGCTTAAAGCTTGAAGGCAATCTCAATCTGAGATGAGAAAGGCTGAGGATGAGGCT

41090 AGTACAGAGCTCTGAGTATATAAGTGGTCTCATCAGATGAGGCTATCTATGAGGCA
TCTATAAACTCTTCTGAGGCTCTGCTTTGATGAGACAGATAAGGAGGAACTATCAAG
AAAGTTGAGGCTCAATCTCAATCTGAGATGAGAAAGGCTGAGGCTTCTGAGTCTGAG

[10,1]
TCTTTTCTCTGAGGCTCTGCTTTGATGAGAAAGGCTCTTCTGAGTCTCAAACTAA
AAAGGCTCTCTCTCTCTGAGGCTCTGCTTGGTCTCTCTGAGTCTCTGAGTCTCTGAG
CTGAGCT

41260 GATTTGAGTCTCTGAGTATATAAGTGGTCTCATCAGATGAGGCTATCTATGAGGCA
TCTATAAACTCTTCTGAGGCTCTGCTTTGATGAGACAGATAAGGAGGAACTATCAAG
AAAGTTGAGGCTCAATCTCAATCTGAGATGAGAAAGGCTGAGGCTTCTGAGTCTGAG

[14,1]
GATTTGAGTCTCTGAGTATATAAGTGGTCTCATCAGATGAGGCTATCTATGAGGCA
TCTATAAACTCTTCTGAGGCTCTGCTTTGATGAGACAGATAAGGAGGAACTATCAAG
AAAGTTGAGGCTCAATCTCAATCTGAGATGAGAAAGGCTGAGGCTTCTGAGTCTGAG

41421 AAGAGCAGTCTTTCTGGAATTCACACAATAAAATGAGGCTCTCTCTCTTCTGAGGCTCTGCT
GCTCTCTCTCTGAGGCT

[17,1]
TTCTTTAAGAGGCTCTCTGAGTATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT
CT

42640 AGTACAGAGCTCTGAGTATATAAGTGGTCTCATCAGATGAGGCTATCTATGAGGCA
TCTATAAACTCTTCTGAGGCTCTGCTTTGATGAGACAGATAAGGAGGAACTATCAAG
AAAGTTGAGGCTCAATCTCAATCTGAGATGAGAAAGGCTGAGGCTTCTGAGTCTGAG

[21,1]
ATCT
CT

FIGURE 3, page 79 of 122

[illegible]

FIGURE 3, page 81 of 122

[illegible]

55058

55171

55801

56324

56557

56716

FIGURE 3, page 83 of 122

63688

64921

64934

65150

65198

65674

FIGURE 3, page 85 of 122

[illegible]

(2, 1)

INDEX

وہ

(A. H.)

45

2532

31 Apr

1997-98

A.A.

215

650

A192

1997

IT.

100

23

AG

TC

CATCTTTTGGTCAAGGTAAATATTTCATATATGGACTGGGCGCTAGAGTCTTLAGATCG
TGCAGCGCTTTTCAGAGGSAAGAGCTTCATGGGGGTCCAAATCTCTGTAAGAAATTTTGT
TTGCTCTSTTTGGCATACAGATAGAGATTAAAGACCTGTAATTTGSAATCAACAGAA
TTTTTCTGATTTTATATGTTGTTGGTATATAACAAATTGGCTCCAAACTGGTATTTT
(T,C)
ACAAATATCTTTTATTATCTTTATGGATCCCTGGGCGAAATTTCAATAGAGTAC
AATGAAAGATTCGAAAGCTTAAAAATTAAGTGAATTCATTTAAAGAATTTATTTAATC
ATTTAACTCTGTTGGAGCTGTAGCTTCAACACTTACACAAAGCTCTCTGATTTGGCT
GAGCTTCTCAGAAATATCTGATTTCTCTTAAAGTATTGGCTTACATAAAGTCATGGAG
AGAGTATCTATGSAAGTATCTTCAAGATGAAATATGAATGGGAGGATGAAGATAGAG

77275

TTTTTATATATGAAATATATTAATCTGTTGCTCTTTGTAAGTCTCTTTTCACTTAC
ATAATCTTTTAAAGTTTATTCATCTTTTAGCATCTATCAGTCTCTCATCTTTTATCT
ATATCTATAAATGAAATATATATAGGATATAGTATTTTCACTTTTATAGATATACATAT
TTTTTTATCTATTTATTAATTTGATAGGATTTTGAAGTTGTTTTTATTTTACTACTAIG
ACTAATGCTATGSAAGATTTCTTTTACAGTTGCTATGTTGCTATGTTTATTTT
(C,T)
TTGATCTGTAAGTCTGTTGAAATCTCTGTTTATGTAGTAACTCTATGTTTACCTTT
TGAGGAACTCCAAACTGTTTTTCAAGTGTATGACCACTTTTACATTTCTACAGCAAT
ATATAGGCTTTTCAATTTCTCCACTCTTTACCAACTCTGTTATGTTTCTTTTCTTA
TTATAGTCTATCTGTTGCTATGAAAGTCTATCTCTATGTTGTTTATTTATCTATTTGTA
ACGATTTATGCTGTTGCTATCTCTTTTATCTCTATTTGTTATTTTCTATATCTTTT

77282

TATATGAAATATACATCTTTCTGCTCTTTGTAAGTCTCTTTTCACTTACGATATCT
TTTTAAGGTTTATTCATCTTTTAGCATCTATCAGTCTCTCATCTTTTATCTATATCT
TAAATGAAATATTTAGGATATATAGTATTTTCACTTTTATGATATATCTATTTTCTTA
TCTATTTATTTATTTGATAGGATTTGAGTTGTTTTTATCTTTTACTACTATGATTAATG
CTGTTATGSAAGATTTCTTTTCAAGTCTCTCATGTTGCTATGTTTCTATTTCTTTGAT
(G,A)
TGTACTAGTCTGTAAGTCTGTTGTTTATGTAGTAACTCTATGTTTAGCTTTTGAAGAA
CTGCAAACTGTTTTTCAAACTGATTTGCACTCTTTTCACTCTCTACCAAGCAATATATGAG
GCTTTCAATTTCTCTCATCTCTTACCAACTCTGTTATTTGTTCTCTTTTCTATATAGT
CATCTCTGCTGATGAACTGTTATCTCTGTTGTTTTTATTTATCTTTTCTAAAGGATG
ATGCTGTTGAACTCTTTTTTATTTCTATTTGTTATTTTCTATATCTTTTCTTGAAGAA

81236

TTGCTTTTCTTACTATCTTTCTTAAAGGTTCTTGGCAAGAGATCTCTCTGTAAGTTG
GCTCAGTCTGTTGTAAGTTTCTGATATGTTTGGGTTCTCTATCTCTGGGATTTGAAGT
ATTAGATCTTCTGATAGGATATAATTACTTACAGCTTTCTCTCTATATATTTAGTCT
TTAGGATCTTATAAATTTAAAGAGCTGCAAGAGGAAAGTCTCATCTCTTATTTTACA
ACTGCTGAAAGTACAGGCTCAATAAAGGATCTAAATTTCTGCAATTTCAAAATCTGTTAT
(T,C)
ACAGCTGCAATCAGAGTAAAGTTTGAAGCTTTATGAAGCTTACCTATTAATTTCTGTTAAT
AGGCTCAGTCTGAGCTTTACTTACTTAATTTTAAAGATAGCAAGCTTAGGATTTAAAGC
AGATGCTCTTTCTCTGTTCTTAAAGCTTACTTACTGTTCTGTTTAAAGTCTGTTCTGCA
CTTAAAGTCTGATCTGAAAGGCAAAATATTTTCTGTTCTGTTTAAAGTCTGTTCTGCA
AAAGGAGAGCAATATTTCTATCTCTGAGATGCTTCTCTTAAAGCACTATTTATTTCT

82536

GGCTGAATGAGTAATCTCTCTGATTAATAATCAAAAGTCTATTTCTATCTGATTTGA
GATGAGGAAAGAAATGCAAGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG
CAGGAGTTTCAAGCTTAGCACTACTTATTTTTCAGAGGAGGAGGAGGAGGAGGAGGAGG
GGCTCTCTGCAAGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG
GGCAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG
(C,T)
GATCTGGGCTCTTGGGCTGAGTGAAGAGTCAATTAATTAACAGTACTATTTGCTCATGAT
GGGCTATGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG
TTTTTCTGTAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG
CTTGGGCTGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG
ACTATTTATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG

82954

TTTTTTTTCTGTAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG
AAATCTGCTATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG
AAAAATATTTATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG
TCTTTTTAAAGATTTTATTTAAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG
AATTAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG
(A,T)
ATAATTAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG
TTTTCTAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG
TAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG
TATATCTGAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG
ATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG
ATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG

FIGURE 3, page 91 of 122

TAGAGCTGTCAATCTGTGGATGGGAGATCAGGGATTGGCTGGCAAAAGTGTCAAGGGTGTTC
ACAGAGATAGTCTTAGTGCATCTCCACAGTTCTTCTGGCTGSAAGATGCTCTCTGGCTATAT
TACTCTTATGCTATGATTTTCATGCTTACTCTATCAGATCCAAAGGAAGAGATGATTGGPGAG
ATGTAAAGCTCACTGGACGATACGGGGTGAAGGCTAGAGACAATGCTCAAGCTTTGAAGA
GGCTGGCTTTCTTCAAACTGTGCTTCGAGAGAGACAGATTTGTGTGATACTTTGAATTTT
GGCTT

GTTCGGCTAGAGCTGAGCTGATTTCTATCTGTGGCTGGTATGCGAAAGGGAGGCACTGG
AGAAATATCTGATCTCTGCTATTTCTCTGGCTCTTGAATGCTGAATCTCTCTTAATG
AGCTATCTCTCAAGAGCTCTGGCTTTTATATAAACAATATAGATCAGGAGAGATCTTC
ACAGAAATGATCTGGCAAAATGAGGGACCTGTGAGTGTAACTCAAAATAAAAGATCTTAA
GACTCTGAACTCTGGCTTAATGAGATATCTCTGATTTGTGATTTCTTGGCAAGAG

GCTGCTGAGGCTCTGACAGCAATTAGCAACAGCTAAAGGCTCTCTCCACAGCTTAAGCTTTT
 GTAGCTGTATAAATTAAGGATCCCAAGGTATAAGCTGGGTGATTAGGGGCAAGAGAGAAAGTCA
 CCTAGTTGGCAAGGAGGCTTAAAGCTTAAGCTCCCTGCTCTGTAGGACAGAGTACTCAGCA
 ACTATCAAGCTCTCTTAAAGTAAAAACATTTAAGAACAGCTGATGTGACAGAGGGCAACA
 CAGTCAATTAAGTAACTGGCTTTGGAAATGGGAGATTTCAACTTCAATTTCCAGACTGTTA
 [T₄]
 TTTGGTAGTTTAATGATTTAGAGTCACTGTGTTTAATCTCTTAGAGACTCAGTACTTCAAT
 CAGCAAGGGGTGTTACTATAGTAATACCTCTAGAGACTATTATATATAGGAGAGAGAGAG
 CTTCTCAAGCTGTGACATATAGATCTTAGTCTGCTGGTGGTCTGTTTCTGTTTATTATTAA
 GTACAGCAATATATATCTTTGCTTTATTTTTTGAAGTCTTACTGGCTGGTAACTGA
 ATTAGAGCTGTGAGAGATATAGTAAGGCTTTTCTTTTATAATATCATTTATCTTTTCTC

GAGGCGAA TACAGTCGATAAGTAACTGGGCTTTGGAAATGGGAGATTTCAMTTTCAATTTCGA
 GACGCTTATTTTGGTAGCTTTAATGATTTAGAGTCAGTTGTTTAACTGTTTAGAGAGCTGCA
 GTTACTTGCATAGGAGAGCTGTGTACIATATAATTAATGCTGCTAGAGATTTATTATTATATG
 AGAGAGAGAGCTTGTGTATAGCTGTGACATATAGATTCTAGTTGGTGGTTGTTTGTGTGTT
 AITATTAAAGTAAACCAATAAAATATGCTGTTGTTTACTTTTTCGAAGTGTTCAGTGGG
 (T, C)
 GGTAACTGAATTACAGTGCCTGGAGCATATAGCTAAAGGCTTTTGTGTTTAAATTAATCATTA
 TTTTGTGTTCAAGAGGAATAGSAAAAATACAGAGCTGCTTTTAACTTTAATGAAAAAAGTGC
 TTTTATAGCTTGTGTGTTGAAAAACAAGAGSAGAGGAGSAGAGGSGAGGAAGAGATTGTCTA
 TTTCTACTTTAAAGCTAATTAGAGAAAGTAATTTTAGGTAAAGATATTATGAGCTGATTTCG
 GATTAAATTTAAGTATTATTATAGTGTGTTGTAATAGSAAATGCTGAGAGTGCCTTTATTGATTA

AT CAGAGAGAGAGAGAGGTTGGTAAGCTGTGACATATACATTCTAGTTGGTGCTTTGTTTCTCT
TGTATTATTAAATAGTAAACAACATAAATATCCTGTTGTTTATTTTTTGAAGTGTCTAG
TGCTGTCTAATTAATTAGAGTCTCTGGAGATATAGCTAAGCTTTTTTGTGTTTAAATAAT
CATTAATCTCTTGAAGAGCAATAGCAAAAATATAAGGCTCTTTTAACTTTAATGCAAAA
AAGTCTTTATATCTCTCTCTGTAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAT
(16, A)
CTATATCTCTAATTAAAGCTAATTAGAGAGAGTAAATTTAGGTTAAGAGATATGACCTGAT
CTCTAATTAAATTTAAGTATATTATGATCTGTTGTAATAGAGTCTCTGAAGTCTTTATG
ATTATCTGTTGTTGTAAGTGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG
CAAACTGAAG
AAGCTCTGTTCTAGTCTCTCTGAGATAGGTTGAGCTTGAACCAATCTCTCTCTATATCT

TCTGTTCTTATATTATTAATAATTAACAACATAAATATCTGTGTTGTTATTTTTTGAAGTGT
TTCAGTCTGCTGTAAGTGAATAGAGTGGCTGGAGATATAGSTAAGGGTTTTTCTGTTTA
ATAATCATTATTTTTTTTAAAGAGATAAGAAAAATATAAGCTCTCTTTTAATTTTAATG
CAGAAAAAGCTTTATAGCTTTCTGTGTGAAAAAACAGAGGAGGGAGGSAAGGGAGAGAAAG
AGATTCTGTATTTTAACTTAAAGTAATTAGAGAGTAAATTTAGGTAAGAGTATTATTA
[T, 1]
CTGATTTCTGATTAAATTTAAATATTATTATCTGTTTAAATAGAAATCTGAAAGTCT
TATTATTATCTCTGTAAGATGAAGGGCTGAGAGCACTGTAAATAATAAAATTTTCTC
TAAAGCAAGTGAAGAGAGAGATATATTAGAGAAATATTATAATAAATAGGAGAGAG
AGAAAGAGCTCTCTGAGTTCTTTAGATACTGAGCTTGAAGAAATTTCTTCTGAT
ATTTGGCTCTCTCTGCTATGAGAAAGCTAGAGGATACTATAGATAATCTCTAGAGT

[illegible]

GAGTTTGTAGGCTGCACTCTTCTTCTGTTCTTTTGGAGTGTAAATGGAGAAATGGAGTTTGA
AATTATCTTTGTATGTAAGTATTAAGAGGTCACCAAGGCTGGAGTTTACAAAGAGAGTTAA
TGAGATTGGAGTCTTTTCTTGAATTTGTATACACAGGTTCTTTTAAACAAATTTAGAG
CATTTAAAAAAGATTATCTTTATCTTAAGTCCCACTATCTTTACCAATTTAAATTTAGGAC
AACAATTGATTAAGAAACAGAGTCTTTATGCTAGCTTAAGAACTTGGAACTTGAATATCTA
(2)

TTTCTATTCTTATCTTAAAGTCTCTCTTAATTAACCTATTCTTATCTTAATTTAAATTTCT
GTGATCTCTCACTTTCTTATCTTTAAGAAGTGTGATGATTAATGACAGTTCTTGAAGAGG
CTTAACTTGAAGTAAATTA-AAAAATTAACAAACACATCATGATTAATTAATGATTTCT
GAGGTTAGTTTATATCTTTTAAAGGCTTAGAGAAAAGGAAAAACATAATTTTAA
GGAGATTAGGAAATTTCTTTTGGAGGTTGGAAAGGAGCTAAATTTTAAATATGGA

[illegible]

GAG GTTAAAGATTCTTTCTTGGAGCTAAGGCATACACAGGCGACACGAGCGCTTGGATTATGACAA
GCGCATCTGATGGAGTTTGGATCTTTTGTGTGGACCTTGTATACAAACAGGCTTTTAGAGATAAA
CTCTTAGGATATGCGAAAAGCAATTACATTTCTTCTGAGCGCCAGCTACTCTTTACGCAATTCAA
ATTATGACAAACATATTCTATTAAGATATACAGGTAGTTATGTCTACCGCTAAGCAACTCGAATCTG
AATAGCTACTTTTATTCTTACTTTTACCGCTCTTTAGTAACCTATTCTTGATCGACAT
(T,C)
TAAGCTTTCTGAGCTCAGTTTCTTCAATCTTTAAGACAGTGTGATATAATGACAGTATCTG
TAGAAGCAGTTTAACTTGAACTAAGTCAAAAACTTAAGCAAAACATAGAAATTAAGTAT
GAATTTCTGAGCTTAGTTTATATATGTTTAAAGAGCTTAGAGAAAAAGAAAAATATAAG
TATCTTAAGCAATATAGCAAAATCTTCTCTGGGGAGCTTGGAAAAGCAGCTTAAGCTTGAA
GAATAGAGCTATTTTAAAGATGGAGCAAGAGATGAGCAAGGTATGAACTGAGCGCAAT

TATAATAAGTATATGCTGCTGCTAAGAAGCTGGAATTTGAATACCTACTTTTATTCTACTT
CTACCTTTTGTATGTAAGATATTTTGTATGCTACCTATTAACTTTGTGAGCTGCAATTT
TCTATTTTAAATCATTTGATGATGATGACAGTATGTGTACAAATGCTTAACCTGAATGAA
ATGTAAGAAAGATGAAATGAAATGATAGAACTTAAATATGAATTTTCTGAGCTTACTTTATAC
ATGTTTATAGAGCTTAGAGAAATGAAAAAAGCTAAGTATGCTTAGAGAGATTAAGAAATG
[T,C]
TCTTTGGGAGCTTTGGAAAATAATAAGCTTTGAAGAATAGGATGATTTTGTGAAGACTG
GGAGAAAGAGATGAAAGAGTATGAACTGGAGGCGATAGCCTGATCTTCCAGAAAGATG
TCTGATGCTTTAAATGCTATGCTGCTTCTACTTACTTTTAAAGAAATATTCATGCTTTTGA
TACTTTGATTTGAAAGAGCTTTCTATTTTCTAAATTTCTTTCTGCAATGCTTTCTGCTG
GGAGGAGTGGCTTACTTTTGAATGAAATGACATGACAGATAGCTTTTCTCTCTCTT

TATGCTAAGCCTAA GAA CTGGAAT TTGAATACCTACTTTTATTTCTACTTTCTATGCTTG
TTAGTAAATGATTCTTGATG A TATT TAACTTCTGTGAGCTTCACTTCTGATCTTTA
AGACATGATGATTAATGACATATCTGTAGAACAGCTTAACTTGAAT TAAATGAGAGAAAA
CTAAACAAAA A ATAGAAATTAATATGAATTTGTGAGGTTAGTTTATACATCTTTTAAAG
ACCTTGA TAGAAAGAAAAAAGCTAAATATCTCTAAGGAGATTAAGAAATGTTTCTTTGGG
(6, 8)
AGCTTGAAGAAATGAGTAAAGCTTGAAGAAATAGGATGTTTGAATCTTGTGTAAGATA
TGA TAAATAGTAAATGAGTAAATAGCTTGAATGATCTGAGATCTGAGAAATTTTGAATGCT
CTAATGCTATGAGCTTTTGAATGAGTAAATGAGTAAATGAGTAAATGAGTAAATGAGTAAAT
GAGAGCTTTTGAATTTTGAATTTGAATTTGAATTTGAATTTGAGTAAATTTGAGTAAATTT
GAGTAAATTTGAGTAAATTTGAGTAAATTTGAGTAAATTTGAGTAAATTTGAGTAAATTT

STATCTSTAAAGAAAGGTTAAATTGAAATAAATAGAGAAAAATAAAATAAACATATAGAAAT
 TAGAGTAAATTAATTTGAGATTAATTAATAGCATGTTTAAAGAGCTTAGAGAAAAAGAAAAA
 AATATAGTATCTTAATAGAGATTAGAGAAATGTTTCTCTGGGAGAGCTTGAGAAAGAGCAGAAAG
 CTTTGAAATAATAGATATATTTGAAACACTGGGAGAGAGAGATAGAGAGTGAATCAATGTG
 AGAGATAGAGCTTAATATAGAGAGAGATTTCTGATTCTTAATGATAGCTCTCT
 TAGGAT
 CTTCAGCTTAAGAAATATTAATATTTGATATGATTAATCAAGATCTCTTTTATTTTT
 TTAATTTAATTTGAGATAGCTCTCTGCGAGGATGTGGGCTATATTTGTAATAAAT
 AGATATAGAGATAGCTCTCTCTCTTTTGTAAATAATTTGTGTAAATAATATATATCT
 GTTAAAAAATTAAGATTAATCTAGAGATAATTTGCAAAATGAGTAGGCTTAGCTTAAT

92641

GGACTATAA...ATTTCCTTCTAA...TTTTCACATCAAT GAACCTTAACATTTCATC
CTCTCTTAAATATAATAGATCA...TCAGCTTCTGTTTAAACATTTCATCATGCTT

93969

GCCACTGT...TTT...AA...TTT...TGCATCTTATTCAGAG...CATCTGCTAAG
TTA...CATCTGCTAAG...TGCATCTTATTCAGAG...CATCTGCTAAG
TAG...TGCATCTTATTCAGAG...CATCTGCTAAG
AAA...TGCATCTTATTCAGAG...CATCTGCTAAG
AAA...TGCATCTTATTCAGAG...CATCTGCTAAG
[G, C]
TGCATCTTATTCAGAG...CATCTGCTAAG
ATT...TGCATCTTATTCAGAG...CATCTGCTAAG
CTGCTTATTCAGAG...CATCTGCTAAG
CTGAG...TGCATCTTATTCAGAG...CATCTGCTAAG
TAA...TGCATCTTATTCAGAG...CATCTGCTAAG

96601

GATCATTATTAATCTGCTATTTTATGTTTGAAGATATTAGCTGCTAGCTGCTA
AGTTTATTCAGAG...TGCATCTTATTCAGAG...CATCTGCTAAG
CTATAGCTAAG...TGCATCTTATTCAGAG...CATCTGCTAAG
GCTAAGCTAAG...TGCATCTTATTCAGAG...CATCTGCTAAG
TCAATTAAGCTAAG...TGCATCTTATTCAGAG...CATCTGCTAAG
[A, G]
GTAAGTATTAAAGAGAAATGCTAAATTTACTGAGCACTTTTATGCTGCTGCTAAG
TAA...TGCATCTTATTCAGAG...CATCTGCTAAG
AGTTTATTCAGAG...TGCATCTTATTCAGAG...CATCTGCTAAG
GCTTATTCAGAG...TGCATCTTATTCAGAG...CATCTGCTAAG
TCTTATTCAGAG...TGCATCTTATTCAGAG...CATCTGCTAAG

96865

GCTATTCAAGACT...TGCATCTTATTCAGAG...CATCTGCTAAG
AGTTTATTCAGAG...TGCATCTTATTCAGAG...CATCTGCTAAG
TGCATCTTATTCAGAG...TGCATCTTATTCAGAG...CATCTGCTAAG
AGTTTATTCAGAG...TGCATCTTATTCAGAG...CATCTGCTAAG
TCTTATTCAGAG...TGCATCTTATTCAGAG...CATCTGCTAAG
[T, C]
GAGA...TGCATCTTATTCAGAG...CATCTGCTAAG
TAACT...TGCATCTTATTCAGAG...CATCTGCTAAG
TAACT...TGCATCTTATTCAGAG...CATCTGCTAAG
TAACT...TGCATCTTATTCAGAG...CATCTGCTAAG
TAACT...TGCATCTTATTCAGAG...CATCTGCTAAG

98448

TTTATTAATAA...TGCATCTTATTCAGAG...CATCTGCTAAG
[A, G]
TTTATTAATAA...TGCATCTTATTCAGAG...CATCTGCTAAG

100137

TTTATTAATAA...TGCATCTTATTCAGAG...CATCTGCTAAG
TTTATTAATAA...TGCATCTTATTCAGAG...CATCTGCTAAG
TTTATTAATAA...TGCATCTTATTCAGAG...CATCTGCTAAG
TTTATTAATAA...TGCATCTTATTCAGAG...CATCTGCTAAG
TTTATTAATAA...TGCATCTTATTCAGAG...CATCTGCTAAG
[T, C]
AGTTTATTCAGAG...TGCATCTTATTCAGAG...CATCTGCTAAG
AGTTTATTCAGAG...TGCATCTTATTCAGAG...CATCTGCTAAG
AGTTTATTCAGAG...TGCATCTTATTCAGAG...CATCTGCTAAG
AGTTTATTCAGAG...TGCATCTTATTCAGAG...CATCTGCTAAG
AGTTTATTCAGAG...TGCATCTTATTCAGAG...CATCTGCTAAG

100264

C...TGCATCTTATTCAGAG...CATCTGCTAAG
A...TGCATCTTATTCAGAG...CATCTGCTAAG
AAATA...TGCATCTTATTCAGAG...CATCTGCTAAG
CTTAATC...TGCATCTTATTCAGAG...CATCTGCTAAG

TCAGTCAATTTTAAATTCAGTGTGATGTTCCATGAGAGGTACATAATCCATAAAAG
CTCCCTCAGGAGTGTAACTTATTAGGSAATAAATATATATATAGCAATAAAAAA
[1.1]
CAATTCAGTACCTTCACTAAGTAGCAATTTATGTATTTTCATACTTAAAGTACAGAG
TTTATGCTTCACTAATTTTGAATGCATCCATCATGCTTCACTACAGGAGGATAAGAG
TGCTAATCATTTAGAGCAAGTGAATGAGAGAGTCTTTTAACTACAGAGGATAAGAG
TATTAATTAATTTTCTTGAATGTTAAAAATTAATTAATTAAGAGCATCTTAAATTC
ACCTCTCTTCAAAATCTATGCAATGATGAGGAGTCTTATTTTCTCATATTTTCTT

110789 CAGTCAATTCAGTACCTTCACTAAGTAGCAATTTATGTATTTTCATACTTAAAGTACAGAG
CTCCCTCAGGAGTGTAACTTATTAGGSAATAAATATATATATAGCAATAAAAAA
[1.1]
CAATTCAGTACCTTCACTAAGTAGCAATTTATGTATTTTCATACTTAAAGTACAGAG
TTTATGCTTCACTAATTTTGAATGCATCCATCATGCTTCACTACAGGAGGATAAGAG
TGCTAATCATTTAGAGCAAGTGAATGAGAGAGTCTTTTAACTACAGAGGATAAGAG
TATTAATTAATTTTCTTGAATGTTAAAAATTAATTAATTAAGAGCATCTTAAATTC
ACCTCTCTTCAAAATCTATGCAATGATGAGGAGTCTTATTTTCTCATATTTTCTT

110884 GCTTTATGCTTCACTAAGTAGCAATTTATGTATTTTCATACTTAAAGTACAGAG
CTCCCTCAGGAGTGTAACTTATTAGGSAATAAATATATATATAGCAATAAAAAA
[1.1]
CAATTCAGTACCTTCACTAAGTAGCAATTTATGTATTTTCATACTTAAAGTACAGAG
TTTATGCTTCACTAATTTTGAATGCATCCATCATGCTTCACTACAGGAGGATAAGAG
TGCTAATCATTTAGAGCAAGTGAATGAGAGAGTCTTTTAACTACAGAGGATAAGAG
TATTAATTAATTTTCTTGAATGTTAAAAATTAATTAATTAAGAGCATCTTAAATTC
ACCTCTCTTCAAAATCTATGCAATGATGAGGAGTCTTATTTTCTCATATTTTCTT

115075 AGGCTGATGCTTCACTAAGTAGCAATTTATGTATTTTCATACTTAAAGTACAGAG
CTCCCTCAGGAGTGTAACTTATTAGGSAATAAATATATATATAGCAATAAAAAA
[1.1]
CAATTCAGTACCTTCACTAAGTAGCAATTTATGTATTTTCATACTTAAAGTACAGAG
TTTATGCTTCACTAATTTTGAATGCATCCATCATGCTTCACTACAGGAGGATAAGAG
TGCTAATCATTTAGAGCAAGTGAATGAGAGAGTCTTTTAACTACAGAGGATAAGAG
TATTAATTAATTTTCTTGAATGTTAAAAATTAATTAATTAAGAGCATCTTAAATTC
ACCTCTCTTCAAAATCTATGCAATGATGAGGAGTCTTATTTTCTCATATTTTCTT

115286 CTAGATGCTTCACTAAGTAGCAATTTATGTATTTTCATACTTAAAGTACAGAG
CTCCCTCAGGAGTGTAACTTATTAGGSAATAAATATATATATAGCAATAAAAAA
[1.1]
CAATTCAGTACCTTCACTAAGTAGCAATTTATGTATTTTCATACTTAAAGTACAGAG
TTTATGCTTCACTAATTTTGAATGCATCCATCATGCTTCACTACAGGAGGATAAGAG
TGCTAATCATTTAGAGCAAGTGAATGAGAGAGTCTTTTAACTACAGAGGATAAGAG
TATTAATTAATTTTCTTGAATGTTAAAAATTAATTAATTAAGAGCATCTTAAATTC
ACCTCTCTTCAAAATCTATGCAATGATGAGGAGTCTTATTTTCTCATATTTTCTT

121154 GATTAATTCAGTACCTTCACTAAGTAGCAATTTATGTATTTTCATACTTAAAGTACAGAG
CTCCCTCAGGAGTGTAACTTATTAGGSAATAAATATATATATAGCAATAAAAAA
[1.1]
CAATTCAGTACCTTCACTAAGTAGCAATTTATGTATTTTCATACTTAAAGTACAGAG
TTTATGCTTCACTAATTTTGAATGCATCCATCATGCTTCACTACAGGAGGATAAGAG
TGCTAATCATTTAGAGCAAGTGAATGAGAGAGTCTTTTAACTACAGAGGATAAGAG
TATTAATTAATTTTCTTGAATGTTAAAAATTAATTAATTAAGAGCATCTTAAATTC
ACCTCTCTTCAAAATCTATGCAATGATGAGGAGTCTTATTTTCTCATATTTTCTT

121250 AAGTAACTAGTGAATTCCTCCTTTCATATGAGCAATACATTTCCCAATATCCAGCTAG
CTCCCTCAGGAGTGTAACTTATTAGGSAATAAATATATATATAGCAATAAAAAA

FIGURE 3, page 97 of 122

ACTATGTTTCCCAAGGAGAAATCTCTATATTATCTCTTTTTATAAAAGCAGAAGCAT3
TATAGAAATATTAATATATTTTCTTAAAGTGTAAATTTCTTTAGTGTGTTAAGAG
AGAAATTTTATAGTATATTTCTCAAGATCTATTTCTCAAGATCTATTTCTCAAGATCT
GGTATTTTAAAGAAATCTCTCAATAAATTTCAATAAATCTCTGTCTGTCTAGACTTAA
(T, 7)
AGTACATCTATTAATTTAGTGTCTAGAGAAATTTATCTTATAGTGTCAATGTCTCA
GAATTTATTTTGTAAAGAAATTTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT
AAATTTCTTATTAAGTGTATATTTTCTTAAAGATCTCAAGATCTATCTCTCTCTCTCT
CTCTATTTATTTATTAAGTGTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT
TTATCT
132179 CATTAAAGAAATCTCAAGTCT
CT
ATTTCTCAAGAAATCT
GAGTCTCAAGAAATCT
TTAGCACTTTCT
(G, 7)
GCTTTTAAATCT
TGGGGTATATTAAGTGTCT
GATCT
CT
TCT
132792 GCTTCT
ATTTCT
ATTTCT
GAGTCTCAAGAAATCT
CATTAGTCT
(C, 9)
AAAGTCT
TCT
AAATCT
AGTCT
ATTTCT
133502 AAAAGTCT
AAAGTCT
GAGTCTCAAGAAATCT
CT
GCTTCT
(A, 7)
GAGTCT
ATCT
TAGTCT
AGTCT
CT
133661 AGAAGTCT
TTCT
GAGTCT
CT
CT
CT
(A, 9)
AATCT
TCT
AGTCT
ATTTCT
CT
133768 AAGTCT
GAGTCT
AGTCT
CT
CT
CT
(C, 7)
TATCT
AATCT
TAATCT
TCT
AATCT

FIGURE 3, page 99 of 122

142186

142212

142600

142632

145397

145438

FIGURE 3, page 103 of 122

[illegible]

[illegible]

TTTA GATCTTATCATGAGCAT TATC TCTGATGATAAT TTCTGCTCTT TCTGGCTTT
CTAATCTTCTC CTCTTTGAAATTTAA ATCA CATTTT C AAGTGTCTTTCTATCTTTCTT
TCTTTATCTTTTACTTATTTATTCAGTTT TGGGAATGCA TTT TCTTTCTCAAT
AGAT TGTAAATCTTT TCTCTTTTG AAGATCTCTTATT TCCCAAT TCTGGATG
GAGCAT TCTTCAACTCTATGAT TTTTCTTTCTCA TATCTATGCTTTGATGATA
(671)

TCAATG
 ACAAATGCTGTGGTAATAATTTATTTCAGTACTGGTATAAAATAATAATGGTTACGGCAAG
 TCTTAAAGTGTGAGACAGAGGAACTACACTACTCATTTCTTGGTGGAGGAGTCTTAGA
 AACTTTTGGATTTGGAGAGAGATTTTGTGAAATGATTTTGAAGCACTTAGGAGGGGT
 GTTCAGATGGGAGGAGCAACAGAGAGAAAGTAGAGAAACCTCTATTCTTTGATTTCT
 CTTCAGTGTGCCCACTTTGATGATTTCTCTTTTCAGATGGGACTATTTCAGGGGTCAAC

CCTACTCTCTTATTGTATACTAAATAGTCTTGTAAATAATTATTTCACACTCTGTTGTAAC
 AAATAAAATGGGTACCGCAAGAGCTGAAAGGTGAGACAGAGAGTACACACTACTGATGTGGT
 TGCTGTAGAGAGCTTTAGAAAAATTTTGGAGTTGAGACAGAGCTTTGTGAAAGTCACTTTT
 CAGGCACTTAGCGAGGGTCTGTTGAGATGGGAAAGAGCAACAGAAAGAAACAGAAAG
 CATTATTTCTTGATTTTCTTCTCACTTCTCCCACTTTGATGAGTTCTTCTCAGAGT
 [C]T

3AATATTCGAGGGGCTGACCTCGAAGTCTATTTCAGCGTACGCTTTGCGAGCATAAATGTACCT
 GAGAGCTCTGCAACTAATAAAGCTAGAAAAATGTAATTTGCTTTGTTGTGAAATCAICTGTG
 GGCTCAGTAAAGTACACACACTCTCAAAAGAGCTCCAACTACCGCTCAAACTAGAGAGTTC
 AGAGCGCTGGGGTTTGTGAGTGTGTGCAATTCGCAATTAATTAAGTCTGTCTGAAGGCT
 CAATTTCGACAATATAAAGATAGGGAATAATAAGTATCTACTCTGAAAGATTAAAGTGGAT

CTAAGCTTTCGATTGCTATAGTAAATAGTCTTGTGAATAATTTATTGCACTATCGGTGTAAACA
AATAAATCGGTACAGGAAGACCTGAAAGGTGAGACAGAGAGAGTATATTA-TGATGTGGTT
GGCTGCAGGAGATCTTGAAGAACTTTTAAAGTGGAGAGAGTTTGTGAAAGCTGATTTTTC
AGGAGTTAAGGACAGGCTGCTTACAGATGGGAAAGAGCAACAGAGAGAAACAGGAACATC
CTATTTTTCTTGATTTCTCTCTTCACTCTCTCAATTTGTGATGACTTCCTTCAGACTGC
[6.1]

[G.A]
 AGTATTG AAGGGGTCAAGTGTGAAGTGTATTTCAGGAAGGTTTGAGAGATAATGTAGGTTG
 GAGGTTT GGAAGTAATAAAG CAGAGAAAATGTACCTTTGTTTGTGAGATCATCTCTTG
 GGGTGTGAGAGAGATGATATTTTCAAGAGAGGTCATGATGAGAGATCAGAGATCA
 GAGGGCTTGGGTTTGTGAGTGTGTGAGCTTGGATGATGATTAATTTTGTAAAGTC
 AALLTCAATATATAAAGATGAGATATTAATGATTTTCAAGGATTAAAGTATTAAT

AGGCAAGAGAGAGTGTATTCTTCTCTAGAACTTTAGACACCAACACAGCTGTGCTGA TACC
TTGATTTTAGCTCTGGGACACTATCTCATGGATTTAGCTCAAGAACTCTAAGATAGTAC
ATTTGCTTTCTTTAAGACAGTAAATGCTGTGATAACTCTCTACAGTAGCACTAGGAAAT
ATATACACCTCTAATTCTCTAAGAAGAAACAAA CAGCAATTCAGTAATGGCTCTCTCT
CATTTAGCTATAGATCAGAAAGAGATACTTTAATTCAGGACACATTTTATTATTATT
[+1,81]

TTTATTCTAGTTCAGTTAGTTAGTTGAGACAGAGTTTCACTCTTGTGCACTCAGGCTGSGAGTG
CAATTCAGACAGATGTGGGCTTACTGTAACTCTGCTCTCCAGGTTTAAAGCAATCTCTTCTGC
CTCAGCTTACACAGGTTATCTGGATTTACAGAGTTATGTGCATCATGCTGGCTGAATTTCTGT
AAATTTCTTTAGTAGACAGTGGGCTTTCATCATGTTTTCGAGGCTGGCTCTCTTAAACTCTGGA
CTCAGAGTGATCATCACTCTGAGCTTCAAAAGTGCTGGGATTAAGGCTGTGAGCTACT

GGTAAGAGAGAGTGGAGTTCTTCTGTAGAA TTTTACAGACGAAATAG AGCTGGTGGAGAGCT
TATTTTATGCTGGGAGAGCTATCTCATGCACTTTATCTCAAGAACTATAAGATAGTACA
TTTCTATTTTGTAAATGATAGTGTCTTATAACTTTTACAGACGAAATATAAGAAAT
AGTATATATGTAATTCTTAAGAGAGAAAGAAATATGATGGAGTAATGCTCTGTCAATC
ATTATATATAGATACAGAGAGATAGATTATCTTCAAGACAGACTTTATTTATTTATTTA
[1-15, 11]

[-A,T]
TTATTGAGTGAAGTTAAATTAATGTGAGAGAGAGAGTTCACTCTTTGTGCACAGAGGCTGGAGAGTGG
AATATGACATGATGTGGGCTACACTGCAAGCTCTGCTCTCTGAGTTCAAGCAATTTCTCTGCG
TCACCTATACAGAGTAACTGGATTAAGTAACTGTCACAGATGCTGGCTTAATTTTCTA
ATCTTTTATAGAGAGATGGGCTTCTATGATCTTCTGAGTTGGTTCTCAAGCTCTTAC
CTAGATGATCAGCACTACCTGACATCTGCAAAATGGCTGATTAAGAGGGTGAAGCTATG

AGAGAGTCTGATTTTTCCTA-AACTTTGAGACACCAACAGAGGCCTTTGACACCTTGAT
TTTAACTTTGGATATCTTGCATGATTTTGCCTTAAAGCTGTAAATAGTAGATTTT
TCTTTTCTTAAAGGCAATAGTGTGTGTGATAAATTTTACAGAGAGGAGTAGGAACTAATAC
ACCACTTAATTTCTCAAGGAAAGAACAGAGAGATGAGTAATGCTTCTACTTATTT

[illegible]

[G.A]
CAGGAGAGAGTTTCTGAAAAGATTAGAAAAAGAGGGTGTGTTCTGTGAGAAAGAGAGATTTC
AGTTTAAAGTCTCTTTATAGAAAGAGCAATAGATGTCAGATTCTAAATGAGGGTCTCAAAA
TTCTGATTGAGAGATTCTCTTTATAGATTACTCTGATGGTCTAGTAAGTATATATTTGGCAATG
GAAATGAGAGTAAAGATTAATATTTTATTTGAGTATTTTAAAGTGGCTGCTGAGAGACA
GAGATAGAGATCTAGAGTTCTTTGTGTTTATAGAAAAATTAATTTGCTTAAAGATTGGT

GATTTTAAAGTGGGCTACAGACACACAGAGGTCATAGGTCCTCTGTTTTCAG
 AAAACACCATTTTCTATAAGATTTGCTTCTGGTGAGTCCAAACAGGTAGAAACTACAACTA
 CATTCATGAAATTTTATTAAGAAATTAATTAATTTAGTGTGACAGAGGTCAGGAAGAGATG
 ACGGAGTACGCTATTGAGCTTTATTCGGGCGGTACTGGGAACACGAGGACAGTTGGCAT
 TTTGGAGCTTTTAAATTTTATTTTCTGTAGATCTTAGATGGAGCTTTTATTTATTT

GTATCTTAAGCTTATGTTTACGTTCTCTGACAGGTTCTGCTTAGGCGAGGTTGGTATAGTACTTG
GCAAAAGGCTGGCTTTGAGGCAAGTTTGGGTTTGAACTCTTACCTTTTATCTTATTAGGTA
TGTAAGATTAGTAACTTATATCACTCTTTCTGAGTTTCTGTTGCTTATCTTTAAAGAA
AGAAATATATATATATACTTTATAGGTTTATATGAGAACTAAGTGAGATCTCTCAAG
GCTCTGGAAGTGAAGTATATATATCTGTTTATGCTGGCATAGCGGAGATATTTTTC

[illegible]

(S.A.)
ACGTTTTCGCAAGAACATCCAGCATTTTATCATTAATCCACAGGCTCAGAGAAATTAGTT
TTCAGATCTTCAAGATCAATTTTAAATGTTTGTCAATCTCAGACTTGTATGAGGAT
GTCTTTGTCTTTCTTTTCAAGATATCAAGATGTGGCTGCTGCTTTCTTCAAAATGTAACTGCAT
AAGTCAGCAAGCAATCTTTTCTTTCTCCATCAATTTTAACTGCTTTTCTACTGATTTTAAAGTAC
AGCTCAATATCTTTTCTTATTTATTAAGAGAAACAGCAATCTTTCTCTTTTAAAGAGATTA

[illegible]

[illegible]

[illegible]

[A, B]
T T A G A A G T T T T A G G A A A A T T A T C T T A C A T T T T T C A T C A A G A A T T G S T A T T G T T S A T T T
A A T G S C C T T T T T C C A T C A C C A T T T T C C T A T A C A A T T T T A S A S T G S A G S A A T C T
A T T C C S A T T T C A A T T G A T T G A G T S C C C T T C C T T C C C A A T T T A T T A T C C C A T T
T T T A T C C T S T T A T A A C T A A A T G A A A A G A T S C A G A A A A A A S A C T A A A G S A C A C
A A A T T C T C T A T A T A A A A G T A A T T T C T A A A T T T A A A G A A T T A T A G C T T C C A T

203159 A T T S T T G A T T T A A T C G T C T T T T C C A T A A A A T T T T T T A T A S A A T T T T T A A C T T G S
T T A S A A T T A C T T T C C A T T T C A A T T G A T T T G A G T S C C C T C C C C C A A T T T A
T T A C T T C A A T T T C A C C C T S T S T A T A A C T A A A T S A A A A A A T T T G A G S A A A A A A C
T A A A S A C A T A A A A T T T C T G A T A T A A A A A T A A T T T T A A A G T C C A A A A A T T T A
T A A T T S C A A T T C A T A T A T T T T T G A A T T T T C C T T A A A T C T T T A T A C A A T T T T
[5, 2]
A T A T A C T C A A T T C A T G T T A T A C A T C A A T A T A C A T A G A T T C A A T A T A T A G C C T A A A
C C T C A C A T T C T T C C A T T T C T A C T S T T G A S C T A G A S C C A G G C C A C T T T C C A A C A C
C A C A C A G T A G C T T C C T A C A A C C A C G S A S T C C T S T A T S T T C T T G C C C C T C A A A G S T
A C T T T T C C A T C A A A G A C S A G S A A A T A A T T T C A A A T A T A T A T A G S T T A T A T S C T C C
T T T C C T A A A A T T T T A C C A C T T T C C T G T G C T A G T A A A T A T A C A A C A T G C C C C T A A S A S

203168 T T A A S T S T T T T T C C A T C A C C A T T S T T C C T A T A C A A T T T T A G A C T G G G T G G A G S A A T
C T A C T T C C T A T T T A A T T G A T T G A G T G G C C T G C C C C C C A A G T T T A T T A T C C C C A
C T T T T A C C T T T T A T A A T T A G A A T G A A A A A C T G S C A S C A A A C A A G A C T A A A G G G A C
A A A A T C C T G T T G A T A T A A A A G T A A T T T T A A A C C C C A A A S A A T T A T A S C T T G C C
A T T C C A T A T S T T T T T G A A S T T T T G C T T A A A T C T T T T A C C A A T T T T G A C C A T A T
[5, 4]
A A T C A T C T A T A G T A T C A S A T A T A G A C A T A S A T A T T A A T A T A G C C T A A A C C T C A C C A C
C T T C C C A T T T C T A C T G C T G A G C T A G A G C C A S C A T C T T C A C A C A C C A C A C A S T A
G C C C C T T A T A G T C A C C A G T C C C C C T A T S T T C T T S C C C C T C A A A A G S C T A C T T T T C C A
C C A C A A G A C G A C C A C A A T A A T T T T A A A T A T A T A G S T T A C A T G C C C C T T T C C T T A A
A A T T T T A C C A C T T T C C T G T T G C C A G T A A A T A T A A A C A T G C C C C T C A G A G C C C T A A T S

203704 C T T A A A A T T T T A C A C T T T C C T T T T G C C A G T A A A T A T A C A A C A T G C C C C T C A G A G C C C T
T A A T G C T S T T C C C T G T G S C A C A G C T T C A A T C C T T T T C C T A G S T C A T T T C T C T G C A
S T T A C T T G C C A T S T T T G C A T T C C T T G A T A T A C A C T T C A C C T T T C C T A A G T C A T T G C
A T A T G C T A T T C C T T T A C C T G C C A T T T C T A T C A T A G A T T T C A T S T G C T G T G C C T C C
T C T C A T T A A S C T C A C T C A A S T G A A C A C C T T G A A A C S A A T C C T T G A C T A G S A
[5, 7]
T T T A A A S T A C T C C C A C T A C C A G C T C A C A G T A C A A T T T C C T T T T A T T T S T A C T T T
T A T S T S T T A T T C C T T C G A T A T A T T T A T T G C T T A T T A T C A G A T T G A S T T T G
T A A A T T T T S T A A S T G T T A A A T T A T C A C A C A C A T T T T T G T A G C C A T G A S T
A A T G C T T A T A T G T A C A T T T T A A A T G C T T S T A A A A T T A A A A G A C A C C A T T T T G T G A C
A A T G A A A A T T A T A S A S A T T A A A T T T C A C C C T A A A A G T T T T T G G A A C A T A T

204111 T A S A T T G A S S T T G G C A A A C T T T C C C T A T S C C A A A T T C A T C C C A C C C T A T T T T T
A C A G C C A C S A S C A A T G C T A C A T G T A C A T T T T A A A T G C T T S T A A T A A A T A A A A S A A
G A C A T T T T T G A C A T S T G A A A A T T A T G A G A S T T A A A A T T C A G T G C C C A T A A A G T T T T
T T G S A A A T A G C T A T G C C A T T T G T T A T A T A T A T A T A T T G C C T G C A T G A C A A
C A C A S A S A T A A G T A G T G G A A C A C A A C T A T A T A T T A C A A A G C C A A A S A T A T S T A C C
[5, 4]
T T T G S C C C T T T A S G A T A A A G C T T C C A A C C C T T G T C T G S A T A T S T A T T T T C T T C A T A T T
T C T T A C T T C C T A A A T S T T T A A A A C A A A C T T T T A A A A G C A A G S A C A T A T T T T A T
T T T A T T A T A T T A C A G T G C C T A G A A T A T A T G A A A C A G S T A A S C A C A T A C A T A T A A A A
G C T T G T T A T T A T A C A C T S G S A A S T T A T C A A A T T T T C T S T G A A T A C A G A G C A C A C
I A T S T A G C C A T A T T C A A A A S A T C T T C A A A A S T A A G S G A A A A A A T G C C T C A A A T

204132 C T C C T A T T G C C A A A T T A T C C A C A T A T A T T T T T G T A C A S C C A T G A C T A A T G S T T
A A T T T A C A T T T T A A A S S T T S T A A A A A T A A A A C A A S A C A A T T T G T S A C A T G T G A A
A A T A T C A A A A T T A A A T T T C A S T S T T A T A A A T T T T C T G A A A T A T A C T A S T T A
T T T G T T T A T A T A T C A T A T A T C T G C C C T A A T S A A A A A A C A G A T A C T A S T G C A
A C A C A A T A T A T A T C C A A A S T A A A A A T A T S A C C T C T C G C C C T T T A S G A T A A A G
[5, 7]
T T S T A A C C C C T S T C T C A T A C T A T T T T T A T A T T C C T A C T C C T A A A T S T T C T
A A A A A C A A T T T T T A A A A C A A S C A C C A T T T T A T T T T A T T A T T A C A G T C C
T A G A T A T A T T G A A C A G A S T A A S C A C A T A T A T A A A A G G T T S T T A T A C A T T A C T G G
C A A G T T T A C A A A T T T T C T G S A A C A G A A C A C A C A T A T G T A G C C C A T A T T T A A A
A S A T T T S A A T A A T A A S S A A A A A A T T T C A A A T T T A A T A A A A A A C A C T A A G

204285 A S T T T T T T S S A A S A T A G T A T C T T C A T T T T T T A T A T A T T A T S T A T A T S C C C T C C C A
T G A A A A A C A G A T A A A T A S T G G C A A C A C A C A T A T A T G A T C C A A A S C C A A A A A A
T C T A C C C T T S C C T T T T A S A T A A G C T T T T A A C C C T G C C T S A T A T S T A T T T T T
T C A T A C T T T T A C C C C T A A A T G T T C T A A A A C C C A C T C T T T A A A A G C A A G S A C A T A

FIGURE 3, page 119 of 122

[5, 5]

ANSWERS

[57]

CTT

1. 2. 3.

524

15.4

CCA

:G,

١٠٠

214

PG.

TI

TCAGTGGGCATTGGGAGATCACGAAGGTATTTGAGTAGAGAGACAACAAAAGGCAATGGA
AGAAGCCCTCCAGCTGCCTTGTGCAGGGAAGGGACCACCACGGCTTCACTCATAGAACTA
AAACACATGCCAAGCCCCAGGTCAATGTTAAGTGCTCATAAGGACAAGCAGCCACTGAGG
[A,G]
AGATGATAAATCTTGTTCATATCAGGGCAAGAAGGAGCCATGATGGCCCTGAGAGACATA
CAAAGGGAATTCAAAGAAGAAAAAGATGGAATAAAGGAAATCTTCCTCAGGGAGGTAGCT
TTTGAGATGACATGTGAAGGTGGTTATTGAGTTGGGGAATGGGATGTGCTTCTCTCCTTT
CTTATTCCCTTTACCCCTCTCACTTTGGGAAGCTCCATGGAACAAAGGTAGAGACCTGG
ATAGTACATGCTGCATCTGAGGCTGGTTTCATGGGAACCTCCATCAAGCTCTTAAGGT

Chromosome mapping:
Chromosome #: 5